

# Consumers' Research Bulletin



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# CONSUMERS' RESEARCH

Vol. 25 • No. 4

## BULLETIN

April 1950

### Off the Editor's Chest

**B**ACK in the early 1930's, nutrition scientists began to discuss the importance of "trace elements" in the diet and by 1939 the term was in common use. Sometimes the phrase "minor elements" was also applied to designate a group of minerals that are essential as ingredients of a balanced ration, but are needed only in minute quantities (according to one author, up to 0.005 percent). These minerals include iron, copper, manganese, zinc, and iodine, and to a limited extent, cobalt. It should be emphasized that the proper and safe way to get these elements is to eat a widely varied diet of foods grown and raised on naturally fertile soils. As a rule, an ample and varied selection of food will supply the needed amounts.

There are, however, certain regions where the soil is, and the vegetables, cereals, and livestock raised on it will be, seriously deficient in certain minerals. In the United States, there is such a region in the so-called goiter belt in the Great Lakes sections and the Northwest where the soil is deficient in iodine. The incidence of goiter in those sections has reportedly been reduced to some extent by the addition of sodium iodide (about 0.01 percent) to table salt. There are, however, some differences of opinion about the desirability of this practice.

It cannot be too strongly emphasized that it is only *traces*, extremely minute quantities, of elements like iodine that are necessary or desirable in the diet. (Iodine constitutes only one part in 3,000,000 of the weight of the body.) Increasing the amount beyond a certain point may cause a decrease in health, may indeed result in serious illness. An intake of too much iodide may cause a disease called iodism, characterized by atrophy of the glands, symptoms of a cold in the head, emaciation, headache, weakness, and skin eruptions. The skull and cross bones symbol on the bottle of iodine in the medicine cabinet is an effective warning of what too much iodine can do.

Apparently acting on the assumption that if a little iodine in the diet of a minority living in certain areas is helpful in warding off a particular disease, a little iodine in the diet of everyone, everywhere, would be even better, government officials have from time to time sought to make the inclusion of iodine in salt compulsory. As we have previously pointed out in CR's BULLETIN, it is sometimes essential for certain individuals to avoid contact with extra iodine in any form; furthermore the effect of iodine on the flavor of butter, margarine, meat, and canned foods in which

(Continued on page 25)

**Consumers' Research functions to provide unbiased information on goods bought by ultimate consumers. For their benefit and solely with the funds they provide (not for business or industry), CR carries on tests and research on a wide variety of goods, materials, and appliances and publishes the findings in CR Bulletin. CR, a non-profit institution, is organized and operates as a scientific, technical, and educational organization.**

**Scientific and Technical Staff and Editors: F. J. Schlink, R. Joyce, Dwight C. Aten, M. C. Phillips, Erma A. Hinek, and A. R. Greenleaf. Editorial Assistants: Mary F. Roberts and B. Beam.**

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; or—information from Consumers' Research's own tests and investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 49, 50—year in which test was made or information obtained or organized by the staff of Consumers' Research.

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\*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.

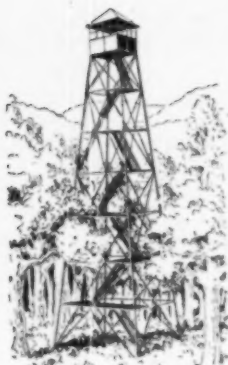
★ ★ ★ For a brief cumulative index of 1950 BULLETINS preceding this issue, see page 26.

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## The Consumers' Observation Post

THOSE NYLON SHIRTS that were in such demand when they were first introduced last summer failed to make the grade for southern wear this past winter. In fact, the Palm Beach correspondent for Men's Wear reported that nylon was out except for undershorts and spun nylon hose. The fabric was found to be unpopular for tropical resort wear because it does not absorb perspiration. As CR reported in December 1949, men who perspire freely would likely find nylon shirts uncomfortable and unpleasant to wear in any kind of weather.

\*\*\*

HARD-SOLED SHOES should be put on babies as soon as they begin to stand, advises Dr. Duncan C. McKeever, Houston, Texas, in a letter to the Journal of the American Medical Association. The baby shoe with a soft sole is somewhat worse for an infant's foot than going barefoot, in the doctor's opinion, and he considers going barefoot in the summertime a most undesirable practice for all children. His views are based on records with photographs of several thousand cases of foot imbalance in children. Not only does Dr. McKeever advocate firm soles for an infant's first walking shoes, but he goes further in suggesting that such shoes should have a small heel and a rigid shank as well.

\*\*\*

BREAKFASTS that contained a substantial amount of protein (25 gm.) have been found to stave off fatigue and provide a sense of well-being, according to a study made by the Bureau of Human Nutrition and Home Economics. The consumers of breakfasts consisting of unsweetened black coffee and doughnuts (7 gm. of protein and 400 calories) reported hunger, weakness, headache, and lassitude during the morning, while those who ate a better meal consisting of citrus juice, bacon, eggs, cereal and milk, toast and butter with preserves, and coffee with cream and sugar were able to stave off fatigue even into the afternoon. Industrial and business concerns that have their own cafeterias would be well advised to eliminate doughnuts and sweet crackers from their menus for mid-morning snacks and substitute bacon and egg sandwiches.

\*\*\*

PRICES of good-quality wool garments are likely to be high in the foreseeable future. There is a world shortage of wool fiber, and the market is using wool a lot faster than it is being grown. Flocks of sheep in the United States have declined from some 56 million in 1942 to less than 32 million at the beginning of 1949, according to The Wall Street Journal. The chief source of good wool is Australia, where prices recently increased 25 percent. Just how much an increase in the price of raw wool will mean in a finished garment is not clear. The biggest item of expense in a man's suit is for labor, and it has been estimated that the cost of wool in a \$50 suit is only about \$5.50. It has also been observed that there has been a fast rise in the use of synthetics as wool substitutes, almost in direct proportion to the price of wool.

\*\*\*

CAN THE FEDERAL, STATE, AND MUNICIPAL GOVERNMENTS SPEND YOUR MONEY to better advantage than you can spend it yourself? That significant question was discussed in the Cleveland Plain Dealer which made the point that if you think the government is not giving you your money's worth for the big chunk it spends of your income, it's time to cry a halt and demand less spending and lower taxes. In behalf of the oil industry, National Petroleum News protests excessive taxes on gasoline and motor oil, pointing out that in New Jersey, for example, 44 cents out of every dollar collected by the state comes from levies on motor fuel and motor vehicles. In most oil states, a severance tax is imposed on oil, yet there is no such tax on wheat, which likewise depletes

our mineral resources. Perhaps the U. S. Department of Agriculture which is currently struggling with a huge wheat crop is overlooking a possible technique for cutting down on expensive surpluses.

\* \* \*

**PRESCRIPTION RATIONS** for dogs have recently been developed by Dr. M. L. Morris, veterinarian and animal nutritionist, of New Brunswick, N. J. He has worked out diets for dogs with kidney trouble, intestinal diseases, for feeding during distemper vaccination, as well as special reducing diets for overfat dogs. The various diets are available in canned form and are packed by the Hill Packing Co., Topeka, Kansas. The rations are distributed throughout the United States and to provide veterinarians with information about the various diets, the Hill Packing Co. issues a monthly bulletin service without charge.

\* \* \*

**REST MAY BE AN IMPORTANT FACTOR** in preventing tooth decay, according to Dr. Frances Krasnow and Miss Nina Budzinsky of the Guggenheim Dental Clinic. Researchers Krasnow and Budzinsky also consider proper diet essential and report that some of their patients showed evidence of getting too much of a good thing in the minerals obtained from overconsumption of fruits and vegetables.

\* \* \*

**WHEN A DRESS** comes back from the dry cleaner's with the belt a different shade, the back of the belt ruined, or the buckle disintegrated, the owner is likely to feel that the cleaner owes her a new garment. It is frequently not his fault, points out Dorothy Siegert Lyle, in charge of consumer relations for the National Institute of Cleaning and Dyeing, for there are many types of belts that will not stand up under any type of cleaning. Among the worst performers are belts with "pasted" buckles that have a pasteboard filler with the back portion held in place by an adhesive that softens in contact with cleaning fluid. Then there is the self-fabric belt with a metal buckle covered with fabric, the bottom portion of which is pressed into the upper portion, a type of construction that shows wear readily. The belt which Dr. Lyle reports gives the most trouble in cleaning is the pyroxylin-coated paper-backing type that has a tendency to crack and peel after cleaning. There are also rubberized innerlinings that dissolve in the cleaning fluid and leave stains, not to mention buckram facings and linings with fugitive dyes that bleed.

\* \* \*

**FOOD ALLERGY** is either a growing malady or the increasing study of the problem has enabled medical men to diagnose it with greater certainty. At any rate, Dr. Albert H. Rowe of the University of California Medical School estimates that some 45 million Americans, or about 30 percent of the population, are allergic to various foods, and he believes that 7 million are in need of medical attention.

\* \* \*

**NEW SHOES**, as well as shoes that have been wet and then dried out, do not squeak as they did in earlier days. But they have other faults. Studies by Dr. L. Edward Gaul and Dr. G. B. Underwood of Evansville, Ind., which appeared in Archives of Dermatology and Syphilology indicate that present-day shoes use a wide variety of adhesives, chemically-treated papers and fabrics which have caused acute and painful foot dermatitis. Women's shoes were the chief offenders, partly due to the fashion of wearing shoes without stockings.

\* \* \*

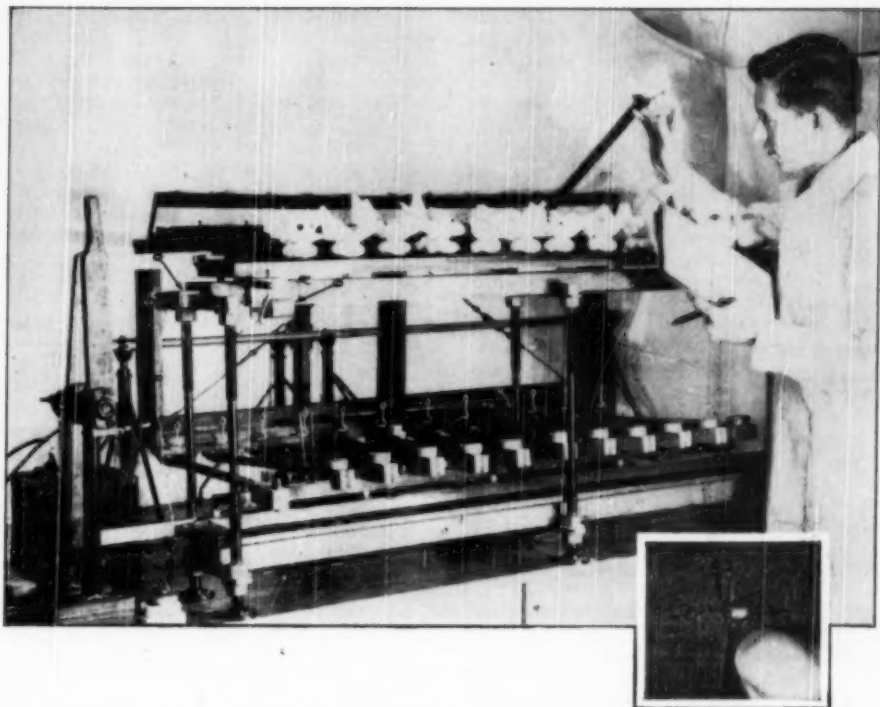
**IF YOU ARE BUILDING A NEW HOME** this spring, be sure to place your order for at least the front and back doors early. There is such a terrific demand for doors that the 35 large mills turning out the majority of softwood doors for home use are far behind in their filling of orders, reported The Wall Street Journal in the latter part of January 1950. Demand is unexpectedly high, and there is a shortage of shop lumber.

\* \* \*

**SMOG OVER DONORA, PENNSYLVANIA**, which caused the death of 20 persons and made some 6000 ill a little over a year ago, has been studied by the U. S. Public Health Service and preliminary findings have been released. The report has been severely criticized by Dr. Clarence A. Mills of the College of Medicine, University of Cincinnati, for omitting calculations of the concentrations of the poison gases in the air, particularly when fog blanketed the area.

*(The continuation of this section is on page 29)*





*Suitably mounted samples from the suits were abraded on CR's abrasion testing machine. One sample from each suit was rubbed in the direction of the warp, another in the direction of the filling yarns. Arrows show the electrical and the mechanical stroke counters that were used, one as a check on the other. Inset shows a sample that has worn through.*

## MEN'S SUITS

**T**HE very best suit will not look well if it does not fit. Clothing specialists advise the man who is buying a suit to take a good look at it in the mirror from the front, the side, and the back. If the purchaser lets the salesman help him put the coat on, or pull it, or smooth it, he may get an entirely false picture of the real fit.

There is a helpful check list for judging fit of a suit in a new pamphlet, "Buying Men's Suits," by Clarice L. Scott, clothing specialist of the Bureau of Human Nutrition and Home Economics. This pamphlet includes general information that the consumer needs to have in buying a suit with respect to various details of construction, workmanship, and fit. Effective illustrations explain the points made. The publication is sold at 15 cents

(stamps not acceptable) by the Superintendent of Documents, Washington 25, D. C.

The consumer is at a great disadvantage, of course, in that he cannot take a coat apart to observe the materials which are used between the fabric and the lining material, and he has no means to make a reliable comparative judgment of the fabrics.

Consumers' Research recently tested 10 brands of men's suits purchased by a number of men in retail stores or by mail. Ratings are based on an examination of the suits for details of construction and workmanship and a series of tests to determine the probable relative serviceability of the fabrics.

Sixteen detailed observations were made on the

coat and 10 on the trousers in arriving at the judgment of the quality of construction noted in the listings. None of the suits was poorly constructed over all. The greatest differences in construction and workmanship of the suits were noted in the trousers. Four of the suits, *Bond*, *Clipper Craft*, *Sears*, and *Ward's*, had the cloth pieced at the crotch. This saves cloth for the manufacturer, but is an undesirable construction because it makes the crotch stiff and bulky.

The principal difference in the coats was in the shoulder padding, which is important not only for the good appearance but also for the long life of a suit. In most of the suits the shoulder padding was of satisfactory to good quality. The padding in the *Bond*, *Eagle*, and *Howard* suits, however, was partly paper, which is a definitely undesirable material for the purpose.

Seam allowance was judged adequate on all suits except the *Sears*, which was skimmed in the trouser seams. Some of the suits had niceties of tailoring which make for a more satisfactory garment. For example, on the *Hart*, *Schaffner & Marx* and *Society Brand* suits the hem of the coat was turned up over the lining, which is a point of good workmanship that obviates danger of the lining sagging below the coat.

All the suits were made of medium-weight fabrics, except the *Botany* "500," which was of heavy material. Comments regarding most of the tests of fabrics appear in the listings. Fabric samples were tested for fading by 40 hours in the Fade-Ometer. (This corresponds to about 52 hours in strong sunlight at midday in June at the latitude of Washington, D.C.) At the conclusion of the test, the samples were examined in daylight. Fading of all samples was negligible except of the suiting used in the *Ward's* suit, which faded slightly.

Samples from the fabrics were also subjected to an abrasion test on an abrading device of CR's own design having a back and forth motion (CR considers its device and method far more satisfactory than the common commercial rotary abrasion tester whose action does not even remotely resemble the abrading or rubbing action that occurs in actual use of garments). On napped fabrics the end point was considered to have been reached when the nap was worn down to the extent of exposing warp and filling threads; on the gabardine, the end point was considered to be when yarns became frayed or severed.

Breaking strength tests were made on all fabrics. The higher the breaking strengths, the more resistant the fabrics will be to the pulling and stretching they will receive in the wear of long service; fabrics that have good breaking strengths that are about the same in both warp and filling directions are usually most serviceable. Some fabrics by the very nature of their construction, however, have quite unequal breaking strengths.

In rating the suits, construction and fabric were given equal weight. Consumers' Research would be glad to have comments from subscribers with experience in tailoring of men's suits as to whether or not they consider this relative weighting to be a reasonable one for most consumers.

As a rule, no vests were furnished with double-breasted suits. With single-breasted suits, vests were usually supplied. There were two exceptions; the *Richman* single-breasted suit had no vest; the double-breasted *Bond* suit had a vest. The absence of a vest was not made a factor in the price ratings, but the consumer who prefers to have one should bear the omission in mind in estimating the suit values on a comparative basis.

### A. Recommended

*Clipper Craft, Models 6027, 6029* (Trimount Clothing Co., Inc., 200 Fifth Ave., N.Y.C.) \$45. Single-breasted coat, vest, 1 pair trousers. Construction, fair, Sharkskin (6027, brown) (6029, blue). Weight of fabrics: brown, 13.4 oz. per sq. yd.; blue, 13.9 oz. 2-ply warp and filling yarns. Thread counts: brown, 70 x 60; blue, 76 x 60. Breaking strengths: (brown) warp, 71 lb.; filling, 60 lb.; (blue) warp, 73 lb.; filling, 58 lb. Resistance to abrasion: brown, above average; blue, good. 2

*Hart, Schaffner & Marx, Executive, Model 96* (Hart, Schaffner & Marx, 36 S. Franklin, Chicago) \$69.50. Double-breasted coat, 1 pair trousers. Construction, good. Dark brown, pencil-striped unfinished worsted; twill weave. Weight of fabric, 13.4 oz. per sq. yd. 2-ply warp and 1-ply filling yarns. Thread count, 71 x 65. Breaking strength: warp, 59 lb.; filling, 43 lb. Resistance to abrasion, good. 3

### B. Intermediate

*Richman, Lot 44113, R 8308301* (Richman Bros. Co., 1600 E. 55 St., Cleveland) \$39.50. Single-breasted coat, 1 pair trousers. Construction, fair. Brown gabardine. Weight of fabric, 12 oz. per sq. yd. 1-ply warp and filling yarns. Thread count, 104 x 58. Breaking strength: warp, 87 lb.; filling, 29 lb. Resistance to abrasion, about average. 1

*Sears Fashion Tailored* (Sears-Roebuck's Cat. No. 055-8103) \$37.95, plus postage. Single-breasted coat, vest, 1 pair trousers. Construction, fair. Blue sharkskin. Weight of fabric, 12.8 oz. per sq. yd. 2-ply warp, 1-ply filling yarns. Thread count, 66 x 66. Breaking strength: warp, 74 lb.; filling, 49 lb. Resistance to abrasion, good. 1

*Bond Park Lane, Model L3 "Hadley"* (Bond Clothing Stores, New York City, Chicago, etc.) \$45.75. Double-breasted coat, vest, 1 pair trousers; second pair of trousers. Construction, fair. Blue-checked gray sharkskin; broken twill weave. Weight of fabric, 13.3 oz. per sq. yd. 2-ply warp and filling yarns. Thread count, 66 x 64. Breaking strength: warp, 67 lb.; filling, 56 lb. Resistance to abrasion, below average. 2

*Botany "500," Model Savoy N3 Lot 21548* (H. Daroff & Sons, Inc., 200 Fifth Ave., N.Y.C.) \$60. Single-breasted suit, vest, 1 pair trousers. Construction, good. Medium gray, pencil-striped, unfinished worsted fabric;



*To test interlining, bend corner of collar. In high-grade suit, it flips back in place.*



*Pull hand down coat front. If interfacing is made of high-grade hair canvas it feels springy... won't wrinkle.*



*In a good suit, shoulder padding is fine lightweight cotton that feels soft and flexible.*



*Coat lapel will snap back after being folded if inner materials and construction are right.*

Photographs and legends courtesy U.S. Bureau of Human Nutrition and Home Economics

twill weave. Weight of fabric, 14.1 oz. per sq. yd. 2-ply warp and filling yarns. Thread count, 72 x 64. Breaking strength: warp, 61 lb.; filling, 50 lb. Resistance to abrasion, poor. Would have been rated A except for relatively poor performance of fabric. **2**

*Eagle, Carlton, Lot 3612* (Eagle Clothes, Inc., 14 E. Jackson, Chicago) \$67.50. Single-breasted suit, vest, 1 pair trousers. Construction, fair. Brown sharkskin, elaborate-patterned weave. Weight of fabric, 13.5 oz. per sq. yd. 2-ply warp and filling yarns. Thread count, 68 x 62. Breaking strength: warp, 68 lb.; filling, 60 lb. Resistance to abrasion, good. Would have been rated A except for use of paper in shoulder padding. **3**

*Society Brand Burnham 3, Lot 20254* (Society Brand Clothes, Inc., 416 S. Franklin Ave., Chicago) \$69.75. Single-breasted coat, vest, 1 pair trousers. Construction, good. Pin-striped blue-gray unfinished worsted; broken twill weave. Weight of fabric, 11.6 oz. per sq. yd. 1-ply warp and filling yarns. Thread count, 66 x 64. Breaking strength: warp, 42 lb.; filling, 41 lb. Resistance to abrasion, about average. Would have been

rated A except for relatively poor performance of fabric. **3**

### C. Not Recommended

*Ward's* (Montgomery Ward's Cat. No. 3840) \$37.75, plus postage. Double-breasted coat, 1 pair trousers; with second pair of trousers, Cat. No. 3940, \$12 extra. Construction, fair. Light gray gabardine. Weight of fabric, 11.5 oz. per sq. yd. 2-ply warp and filling yarns. Thread count, 80 x 52. Breaking strength: warp, 65 lb.; filling, 36 lb. Resistance to abrasion, poor. Fabric faded slightly in fading test. **1**

*Howard, "Palmer," Cloth No. 142333* (Howard Clothing Stores, 40 Flatbush Ave. Ext., Brooklyn 1, N.Y.) \$39.95. Single-breasted coat, vest, 1 pair trousers. Construction, fair. Brown covert; twill weave. Weight of fabric, 12.4 oz. per sq. yd. 2-ply warp, 1-ply filling yarns. Thread count, 60 x 54. Breaking strength: warp, 62 lb.; filling, 42 lb. Resistance to abrasion, poor. **2**

## Today's Automobiles Involve Needless Hazards Manufacturers Have a Pressing Obligation to Motorists

FROM the correspondence with our readers, we gather that many are interested in questions of automobile safety. All such persons will find it well worth while to obtain from their library, or by borrowing from a physician, the article "Medical Criticism of Modern Automotive Engineering," by Fletcher D. Woodward, M.D., Chairman's Address, read before the section on Laryngology, Otology, and Rhinology at the 97th Annual Session of the American Medical Association, Chicago, June 24, 1948. Dr. Woodward discusses the details, which many will find unpleasant but which are none the less important, regarding the nature of injuries produced in automobile accidents, and the cause of those injuries in the light of the design of the cars and the manufacturers' failure to provide vital safeguards.

Driving at too high speed is considered to be an important factor in injuries; use of excessive speeds could be prevented by the car manufacturers through installation of governors which would limit the top speed to 55 miles per hour, yet not interfere with acceleration at lower speeds.

As windshields are another large factor in injuries to motorists in accidents, windows and windshield should be made of a plastic material instead of the "safety glass" now used. The same material should, also for reasons of safety,

be used in headlight lenses. Dr. Woodward also calls attention to the importance of having windshield and rear windows more nearly vertical, a need which CR has emphasized in past years' BULLETINS, and in which respect modern cars represent a very great step backwards as compared with cars produced in the 1930's.

Bumper design should be improved to provide shock-absorbing action. Dr. Woodward favors "blowout-proof" tubes. [CR doubts whether, on good roads, the safe-against-blowout type of tube adds enough to the safety already available in good equipment to be worth any considerable fraction of its great additional cost. "Blowout-proof" tubes tend, too, to interfere with good tire balance.]

There are other important recommendations involving means for making automobile driving safer than it is today, and those interested should by all means take occasion to read the full article in the Journal of the American Medical Association of October 30, 1948. As Dr. Woodward points out, 33,700 deaths and 1,200,000 injuries in motor vehicle accidents in a single year are far too many. He considers that correction of the faults of cars and minimizing of dangers to passengers will be largely up to the automobile designers and manufacturers.



## Plymouth P-20 Special DeLuxe and Studebaker Commander DeLuxe

Note: Since the report on Studebaker cars appeared in the January 1950 BULLETIN their prices have been reduced \$82 to \$141, bringing Studebaker prices more into line with those of cars of the same general size and finish. The *Champion DeLuxe*, reduced by \$87, is now delivered in N.Y.C. at \$1680.

Initial tests on the *Commander* have now been completed, and the additional information, together with the essentials of the information presented in the January 1950 BULLETIN listing, has been included in the listing of that car.

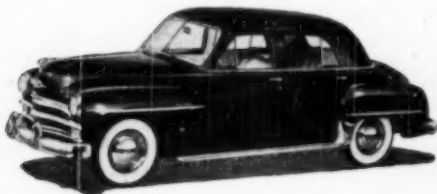
### A- (tentative)

*Plymouth P-20 Special DeLuxe.* \$1540 f.o.b.; \$1719<sup>1</sup> delivered N.Y.C. (Extras: heater and defroster, \$40, \$60, or \$80; radio, \$73 or \$90; accessory group 1 at \$37 includes vacuum booster pump for windshield wipers, foamed rubber front seat cushions, rear bumper guards, wheel covers, rear fender scuff guards.) Engine: 6 cylinder, L head, 3 $\frac{1}{4}$  in. bore x 4 $\frac{3}{8}$  in. stroke; 217.8 cu. in. displacement; 97 hp. at 3600 rpm.; taxable hp., 25; compression ratio, 7 to 1. Engine oil capacity, 5 qt.; cooling water, 15 qt.; gas tank, 17 gal. Rear axle gear ratio, 3.9 to 1 (optional ratios, 3.54, 3.73, 4.1, and 4.3 to 1). Steering ratio, 18.2 to 1. Battery, 15-plate, 100-amp.-hr. Wheelbase, 118 $\frac{1}{2}$  in.; over-all length, 193 in.; width, 74 in.; height, 65 in. Tire size, 6.70 x 15 (adequate). Brake area, 158 sq. in.; brake factor, 40.5. Action of hand brake, which operates on drive shaft, judged inadequate for emergency stops (braking area, 30 $\frac{3}{4}$  in.). Road clearance: front, 8 $\frac{1}{2}$  in.; rear, 8 $\frac{3}{4}$  in. Actual usable seat widths: front, 54 $\frac{1}{2}$  in.;

rear, 49 $\frac{3}{4}$  in. Front seat rises when moved forward (desirable). Headroom: front, 37 in.; rear, 37 $\frac{1}{4}$  in. Leg room: front, 39 to 41 in.; rear, 40 in. Performance factor, 25. Acceleration from 20 to 50 m.p.h., 12.9 seconds on level road (3.4 ft./sec./sec.). Gasoline mileage under test conditions at 30 m.p.h., 23.7 m.p.g.; at 50 m.p.h., 19 m.p.g. Gasoline mileage reported by users: in city driving, 15 m.p.g.; in country driving, 18 m.p.g. Box section frame with 4 cross members (no "X" member) gave impression of lightness, but in combination with body judged satisfactory. Bumpers strong and well secured to frame. Vision over hood, good. Rear vision, good. Accessibility of spare tire, fairly good, but removal of some of contents of trunk may be necessary to take out tire. Trunk space, adequate. Wheels and tires readily accessible for servicing. Riding comfort, very good. Car handled easily and steered well without undue effort on part of driver. Car weight: front, 1800 lb.; rear, 1480 lb.; total, 3280 lb. (Intermediate between Chevrolet and Ford 8 in respect to difference in weights on front and rear wheels — Ford excessive at 450 lb. difference.) Shipping weight, 3150 lb.

*Studebaker Commander DeLuxe.* \$1903 f.o.b.; \$1998<sup>1</sup> delivered N.Y.C. Gasoline mileage under test conditions: 22 m.p.g. at 35 m.p.h.; 19 m.p.g. at 45 m.p.h. Acceleration from 20 to 50 m.p.h. on slight upgrade, 14.1 seconds (3.1 ft./sec./sec.); the *Champion* required 18 seconds (2.4 ft./sec./sec.). For details of specifications of both *Commander* and *Champion*, see January 1950 Bulletin, page 11. For those who do not require the better performance of the large *Commander* engine, the *Champion*, which is priced at about \$300 less, would appear to be a much more desirable purchase. The *Champion* also was considered to have somewhat better riding qualities than the more expensive *Commander*. Weight without passengers or driver: front, 1980 lb.; rear, 1500 lb.; total, 3480 lb. Shipping weight, 3260 lb.

<sup>1</sup>Not including N.Y.C. 2% sales tax.



Plymouth P-20



Studebaker Commander



Courtesy U. S. Testing Co.

*United States Testing Company's Mattress Durability Tester used in making wear tests on box springs. To simulate actual conditions, a mattress was placed over the box spring during the test.*

## Box Springs

**T**HE support of the body in its natural position when lying down helps the sleeper to relax and, according to some authorities, is as important to health as good posture while standing. In a natural posture the spine remains straight when the sleeper lies on his side or on his back. To make good sleeping posture possible, it is necessary to have good bedsprings, even under a very good mattress. The comfort of a mattress, furthermore, depends to a great extent upon the springs, because a sag or "hammock effect" can be produced with a poor spring of any type. The best of mattresses will be unsatisfactory if the bedsprings sag.

The most popular bedsprings appear to be box springs. Box springs are essentially coil springs covered with ticking. The springs are stapled to wooden slats, tied together at the top, and fastened to an outer frame. The top and sides of the spring

unit are padded, and the springs cannot be felt unless they break or come loose. There is an "insulator," commonly cloth, between the coils and the padding.

Box springs are recommended by manufacturers for use with rubber mattresses. Foamed rubber is so soft that a rubber mattress adapts itself closely to the shape of the support on which it rests. The probabilities are that there will be less damage to the mattress itself if a box spring is used rather than open coil springs, unless the springs are covered by a thick pad to protect the bottom of the mattress from wear by the relatively "sharp" wires and bars that form the top of the open bedspring.

Because rubber mattresses are several inches thinner than most innerspring mattresses, box springs are made that are built up to greater thickness to compensate for this loss of bed height.

None of these special springs were included in the present study.

In CR's tests, eight box springs of well-known makes were subjected to the action of a 285-pound roller which was passed back and forth, compressing the unit and allowing it to expand after each pass. Each box spring was supported by a concrete base, and covered by a mattress during the test.

Periodic inspections were made through small openings cut in one end of each of the box spring casings. The condition of the interior of the unit was observed and recorded, and the test continued until a breakdown occurred. Breakdown was defined as coil breakage (of one or more coils), or failure of the tie wires.

After the durability test, thickness measurements were made in the rolled and unrolled areas of the springs in order to determine the amount of compressive set (failure of the spring to return to its original height); then the box spring was opened for a detailed inspection.

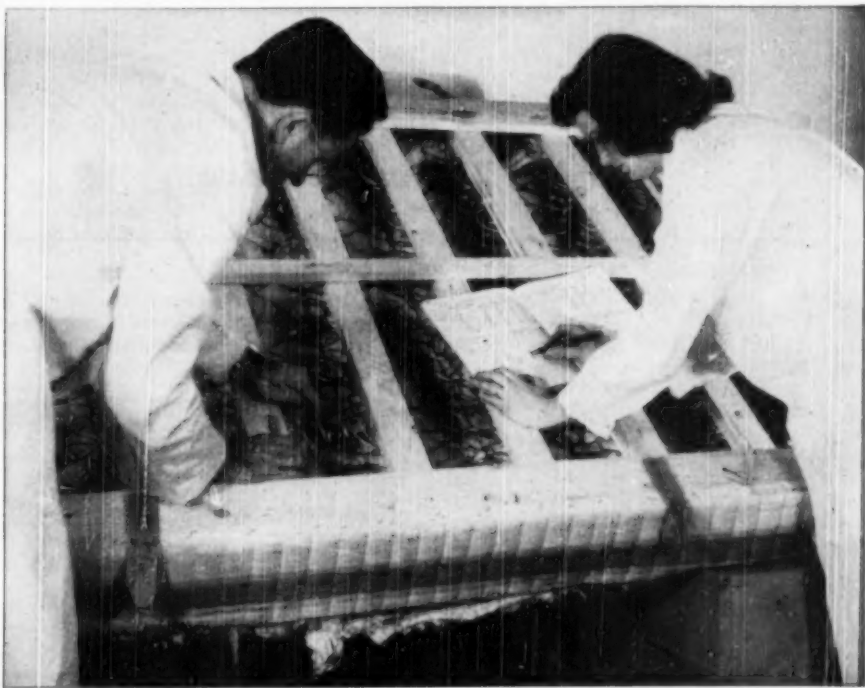
#### A. Recommended

Englander, "Super Bodyguard" (The Englander Co., Inc., Johnson & Stewart Aves., Brooklyn 6, N.Y.) \$49.75.

Had 81 four-coil springs supported by nine  $2\frac{3}{4}$  x 1 in. slats widthwise and one lengthwise. Green ticking with yellow, brown, and black stripes. One broken coil in rolled area after 231,000 single passes of the roller; test ran to 262,000 single passes, with no other spring failure. General appearance at end of test, good; ticking, cotton, and sisal insulator in good serviceable condition. Compressive set of rolled area, 1.0%, low (desirable). 2

Ostermoor (Ostermoor & Co., Inc., 348 George St., Bridgeport, Conn.) \$49.50. Had 72 five-coil springs supported by nine 3 x 1 in. slats widthwise and one  $1\frac{1}{2}$  x 1 in. slat lengthwise. Blue and white striped ticking. One broken coil in rolled area after 176,000 single passes; three broken coils after 211,000 passes. General appearance at end of test, fair; ticking, cotton, and burlap "insulator" in good serviceable condition. Compressive set of rolled area at end of test, 2.7%, below average (desirable). 2

Spring Air (Hyde Park Bedding & Mfg. Co., Reading, Pa.) \$49.50. Had Karr No. 204 box spring unit with 204 springs interlocked with wire, supported by seventeen  $1\frac{3}{4}$  x 1 in. slats widthwise and one lengthwise. Blue, gray, and white ticking with floral design. Two broken coils after 181,000 single passes; five broken coils after 187,000 passes. General appearance at end of test, fair; ticking, fair, with evidence of abrasion in rolled area; cotton, and burlap "insulator" in good serviceable condition. Compressive set of rolled area at end of test, 1.4%, low (desirable). 2



Checking a box spring for failure at the conclusion of the test. The top padding and insulator have been cut loose, and the bottom cover has been removed.

*Beautyrest* (Simmons Co., 230 Park Ave., New York 17) \$59.50. Had 72 five-coil springs supported by nine  $2\frac{3}{4}$  x 1 in. slats widthwise and one  $1\frac{3}{4}$  x 1 in. slat lengthwise. Gray ticking with blue and yellow stripes. One broken coil after 358,000 passes; five broken coils and several tie cords broken after 420,000 passes. General appearance at end of test, fair; ticking, cotton, and fabric insulator in serviceable condition. Compressive set of rolled area at end of test, 0.6%, least of any in test (very desirable). AA3

## B. Intermediate

*Ward's Best Quality* (Montgomery Ward's Cat. No. 66—6988F; made by International Bedding Co., 1016-32 Guilford Ave., Baltimore 2) \$36.50, plus shipping charges. Had 64 four-coil springs supported by eight  $2\frac{1}{2}$  x 1 in. slats widthwise. Gray ticking with brown and white stripes. One broken coil after 129,000 passes; two broken coils and frame bent on edge in rolled area after 142,000 passes. General appearance at end of test, poor; ticking, cotton, and burlap insulator in good serviceable condition. Compressive set, 3.5%, about average. 1

*Serta Coilux 15* (Serta Associates Inc., 275 Grant Ave., East Newark, N. J.) \$49.50. Had 72 five-coil springs supported by nine  $1\frac{3}{4}$  x 1 in. slats widthwise and one 1 x 1 in. slat lengthwise. Gray and blue ticking with yellow stripes and fern-leaf pattern. One broken coil after 121,000 passes; two broken coils and one broken

wire in insulator after 132,000 passes. General appearance at end of test, fair; ticking, fair, with evidence of abrasion in rolled area; cotton in good serviceable condition. One broken wire in woven-wire insulator, but insulator was in good serviceable condition. Compressive set 2.4%, below average. 2

## C. Not Recommended

*Harmony House* (Sears-Roebuck's Cat. No. 1-7134) \$19.95, plus shipping charges. Had 90 four-coil springs supported by five 3 x 1 in. slats widthwise. Blue and white striped ticking. Developed noise, and staple pulled from frame after 54,000 passes. One broken coil, four broken tie wires, one end staple pulled from wooden frame after 93,000 passes. General appearance at end of test, fair; ticking, cotton, and burlap insulator in good serviceable condition. Compressive set, 9.4%, highest of all tested (poor performance). 1

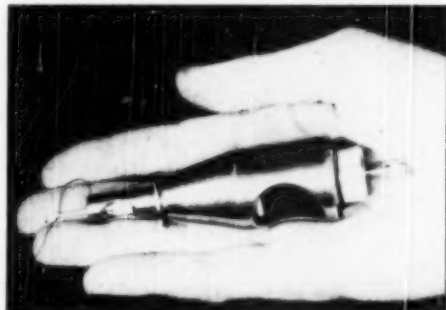
*Slumberon* (Burton-Dixie Corp., 960 Franklin Ave., Brooklyn, N.Y.) \$49.50. Had 72 five-coil springs supported by nine  $2\frac{3}{4}$  x 1 in. slats widthwise and one  $1\frac{1}{2}$  x 1 in. slat lengthwise. Gray ticking with red, white, and maroon stripes. Several coils bent and set after 40,000 passes; after 92,000 passes, four broken coils, noticeable set in rolled area near edge of spring, and frame bent on edge in rolled area. General appearance at end of test, poor; ticking and latex-impregnated sisal insulator in good serviceable condition, but cotton only fair. Compressive set, 8.0% (relatively very high and undesirable). 2

# Novelty Sewing Device

THE *Jiffy-Stitcher* is a sewing device made by the Jiffy-Stitcher Co., Inc., of Los Angeles, and available at \$2.95 from Albin Enterprises, 111 N. La Cienega Blvd., Beverly Hills, Calif. It consists essentially of a metal container for a spool of thread, a so-called shuttle, and a sewing machine needle.

It has been advertised on the radio and in women's magazines, and its literature described it as "The greatest advancement in sewing in 100 years." The four women who tried to use it for CR were very far from agreeing with the ad writer. They considered the gadget clumsy and awkward to use and too large to be handled easily. It made a chain stitch, not a lock stitch as claimed, and the stitches would pull out completely if any loop was not securely fixed or if the thread end was not well fastened. CR's users found that the cloth puckered under the stitches and that it was very difficult to make the stitches even. The sum of their com-

ments was that the sewing results were not worth the trouble of using the gadget; all of them greatly preferred to use an ordinary needle.



*The Jiffy-Stitcher*





## Household Laundry Soaps

**H**OUSEHOLD laundry soaps are available to the housewife in bar, flake, and powdered form. From the chemist's standpoint, whatever their physical form, they can be classified as "pure" soaps or "built" soaps, according to the amount of builder (alkaline salts such as sodium carbonate and sodium silicate) included in them.

*Pure soaps* are those that contain little or no builder. They are best suited for laundering fine fabrics and colored articles. Because they do not harm the hands as built soaps often do, women often prefer to use a pure or unbuilt soap for dishwashing.

Built soaps are combinations of soaps and builders. They are used generally for heavily soiled laundry. Because they supply the housewife with water softeners and soap in one convenient package, they are much used in hard-water areas. Using built soaps, however, may not be as economical or as satisfactory as softening the water, and then using soap. Water hardness varies from place to place and from time to time at the same place, in many instances. By leaving this matter of the amount of softener to be used up to the manufacturer, the consumer is always taking a chance that the built soap will be used wastefully or that he will be using a product that has been skimmed in detergent content. Nevertheless, many housewives find built soaps a desirable compromise, considering their greater convenience as compared with soap used with softener bought separately.

Consumers' Research has had a number of household soaps analyzed chemically. The quality ratings were based upon government specifications,

except for powdered built soaps. (For those, no federal specifications were available when the test was made and specifications of the American Society for Testing Materials were used.) As a rule, if a soap fell below the specifications on one point, it was given a *B* rating; if below on two or more points, it fell in the not recommended or *C* group.

The following discussion may make the meaning of the analyses as reported by the chemist more clear to those not acquainted with the terms.

*Determination of matter volatile at 105°C.* For practical purposes, this may be considered to be a determination of the *water content* of the sample. Any consumer who may be inclined to check the calculations of the tables should bear in mind that to follow practice in the federal specifications the percentages of all constituents other than matter volatile at 105°C are calculated and reported on the basis of *assumed volatile matter* (chiefly moisture) contents. The figures are as follows:

Chip soap.....	10%
Chip soap, rosin type.....	15%
Powdered laundry soap.....	6%
Built powdered soap (A.S.T.M.).....	16%
Bar laundry soap.....	36%

The cost per pound of anhydrous (dry) soap is calculated from determinations based on the actual percentage of volatile matter found.

*Matter insoluble in alcohol.* Practically all inorganic builders fall in the category of substances "insoluble in alcohol." Such builders are soda ash and washing soda (carbonates), sodium silicate,

# HOUSEHOLD LAUNDRY SOAPS

Brand	Weight <sup>1</sup> and Pur- chase Price	Price per Pound of Soap as Received	Price per Pound of "Dry Soap"	Matter Volatile at 105°C (Chiefly Water)	Matter Insoluble in Alcohol, Plus Free Alkali	Identifi- cation of Alcohol- Insoluble Material	Free Alkali or Acid*†	Matter Insoluble in Water	Rosin	Anhydrous Soap by Calculation	Degree of Suds- ing in Cool Water	pH of 1% Solu- tion	R A T I N G
<b>Chip Soaps</b>													
Federal Specification (P-S-566a) limits				10.0 max.	4.0 <sup>2</sup> max.		0.2 max.*	max. 1.0	none	min. 85.0			
<i>Nola</i>	18 oz 29c	25.8	26.3	1.8	0.1	Carbonates	0.04*	0.0	none	89.9	med.	10.0	A
<i>Bright Sail</i>	12.5 oz 21c	26.8	27.8	2.7	0.5	Carbonates Silicates	0.06*	0.2	none	89.3	high	9.8	A
<i>Kirkman</i>	16 oz 28c	28	30.2	3.2	2.7	Carbonates Silicates	0.03*	0.9	none	86.4	high	9.8	A
<i>Chiflon</i>	12.5 oz 27c	34.6	35.4	1.9	0.5	Carbonates Silicates	0.04*	0.2	none	89.3	v. high	9.8	A
<i>Ivory</i>	12.5 oz 27c	34.6	35.5	2.1	0.3	Sulfates Carbonates Silicates	0.04*	0.1	none	89.6	v. high	9.9	A
<i>Lux</i>	12.5 oz 27c	34.6	35.8	1.9	1.0	Sulfates Silicates	0.05*	0.2	none	88.8	med.	9.9	A
<i>Quick Arrow</i>	19.5 oz 25c	20.5	24.1	4.5	7.7	Carbonates Silicates	0.07*	2.0	none	80.3	med.	10.1	B
<i>Automatic</i>	13 oz 25c	30.8	35.8	4.7	7.9	Phosphates Carbonates Silicates Borates	0.05*	0.9	none	81.2	high	10.1	B
<i>Hershey's</i>	12.5 oz 28c	35.8	44.4	9.9	9.2	Phosphates Carbonates	0.17†	0.0	none	80.8	med.	9.9	B
<i>Chipso</i>	20 oz 25c	20	24.4	3.3	8.9	Phosphates Carbonates Silicates Borates	0.04*	4.7	none	76.4	high	10.0	C
<i>Speedup</i>	20 oz 29c	23.2	29.4	3.5	11.3	Carbonates Silicates	0.06*	5.1	none	73.6	v. high	9.6	C
<i>Kirk's American Family</i>	20 oz 27c	21.6	33.3	5.9	18.9	Phosphates Carbonates Silicates	0.07*	9.1	none	62.1	low	10.3	C
<i>Baby Stuart</i>	20 oz 33c	26.4	34.8	3.8	11.5	Phosphates Carbonates Silicates Borates	0.06*	7.4	none	71.1	v. high	9.9	C
<b>Chip Soap, Rosin Type</b>													
Federal Specification (P-S-581) limits				15.0 max.	12.0 <sup>2</sup> max.		0.5*† max.	max. 1.0	max. 20.0	min. 72.0			
<i>Fels-Naphtha</i>	21 oz 26c	19.6	26.5	15.5	9.0	Carbonates Silicates	0.09*	0.7	17.5	75.3	med.	9.8	A

<sup>1</sup>As labeled.

<sup>2</sup>Including sodium chloride.

\*Indicates free alkali.

†Indicates free acid.

borax, trisodium phosphate, and sodium metaphosphates. These materials act as water softeners, and some are useful in dirt removal. Their presence in amounts suited to the particular builder is often desirable, especially if the product is to be used in hard water. No alkaline builder should be present in a soap that is to be used to wash silks, woolsens, or colored fabrics, and builders, too, are irritating to the skin.

A determination was made of the pH (a measure of alkalinity or acidity) of a 1% solution of each of the soaps tested. None was found to be very alkaline (a solution with a pH of 7 is neutral; solutions with values above 7 are alkaline).

*Free alkali or free acid.* Soap is the product re-

sulting from the chemical reaction of one or more fats or oils with caustic soda (lye). During the manufacture an excess of caustic soda may be used, and, unless this is washed out in the process, it will remain in the final product as free alkali.

A slight excess of free fatty acid is sometimes left in the soap to minimize the danger of free alkali being present or coming to be present after a period of storage. Too much free fatty acid will tend to contribute to the soap's becoming rancid or developing an unpleasant odor in storage.

*Matter insoluble in water.* This indicates a "filler," such as finely-ground inorganic abrasive material or other insoluble matter having no value to the user. Such an addition is generally a useless cheap-

# HOUSEHOLD LAUNDRY SOAPS

Brand	Weight <sup>1</sup> and Purchase Price	Price per Pound of Soap as Received	Price per Pound of Dry Soap	Matter Volatile at 105°C (Chiefly Water)	Matter Insoluble in Alcohol, Plus Free Alkali	Identification of Alcohol-Insoluble Material	Free Alkali or Acid <sup>2</sup> †	Matter Insoluble in Water	Rosin	Anhydrous Soap by Calculation	Residue on No. 12 Sieve	Degree of Sudsing in Cool Water	pH of 1% Solution	R A T I N G
<b>Powdered Soap</b>				max. 6.0	max. 4.0 <sup>2</sup>		max. 0.2*	max. 1.0	none	min. 89.0*	max. 1.5			
Federal Specification (P-S-596a) limits														
<i>Ivory Snow</i>	12.5 oz 27c	34.6	36.0	2.2	1.4	Phosphates Carbonates Silicates	0.03*	0.1	none	92.4	none	med.	9.8	A
<b>Powdered Soap, Built</b>				max. 16.0	max. 40.0 <sup>2</sup>			max. 1.0	max. 0-10	min. 50.0	max. 1.5			
A.S.T.M. Specifications (D533-44) limits														
<i>Magic Washer</i>	25 oz 33c	21.2	26.7	9.5	10.7	Phosphates Carbonates	0.01*	0.0	none	73.4	1.2	med.	10.4	A
<i>Super Suds</i>	23 oz 27c	18.8	27.7	8.1	20.1	Phosphates Carbonates	0.05*	1.9	none	62.1	none	med.	9.9	B
<i>Duz</i>	20.5 oz 27c	21.1	28.6	4.5	16.6	Phosphates Carbonates Silicates	0.05*	2.4	none	65.0	none	high	9.6	B
<i>Kirkman Granulated</i>	20 oz 28c	22.4	32.4	5.3	20.1	Phosphates Carbonates	0.06*	2.4	none	61.5	none	high	9.8	B
<i>Oxydol</i>	24 oz 27c	18	29.4	7.7	22.9	Phosphates Carbonates Silicates	0.03*	5.3	none	55.7	none	med.	9.9	C
<i>Rinso</i>	23 oz 27c	18.8	31.7	9.6	22.9	Phosphates Carbonates Silicates	0.06*	5.9	none	55.1	none	med.	9.9	C
<i>Silver Dust</i>	18 oz 28c	24.9	45.1	10.5	25.7	Phosphates Carbonates Silicates	0.05*	6.5	none	51.8	1.4	med.	9.9	C
<b>Bar Laundry Soap</b>				max. 36.0	11.0 (max) 2.0 (min)		0.5*† max.	max. 1.0	max. 25.0	min. 52.0				
Federal Specification (P-S-591a) limits														
<i>Kirk's</i>	7.4 oz	16.6	24.1	28.1	2.7	Carbonates Silicates	0.05*	trace	22.2	61.3		low	10.3	A
<i>American Family</i>	3 for 23c													
<i>Octagon</i>	7.1 oz	15.0	24.8	28.9	9.6	Carbonates Silicates	0.09*	0.02	21.8	54.4		med.	9.8	A
<i>Kirkman</i>	3 for 20c													
	7.1 oz	15.0	25.2	29.3	9.0	Carbonates Silicates Borates	0.07*	0.9	20.9	54.1		low	9.7	A
<i>Ivory<sup>3</sup></i>	3 for 20c													
	9 oz	24	28.8	16.3	0.3	Silicates	0.02*	0.1	none	63.6		high	9.7	A
<i>Swan<sup>4</sup></i>	2 for 27c													
	8.3 oz	26	29.6	10.9	0.6	Silicates	0.03*	0.2	none	63.2		med.	9.8	A
<i>P and G</i>	2 for 27c													
	7.5 oz	14	27.8	25.4	19.7	Carbonates Silicates	0.09*	0.06	none	44.2		low	10	B
<i>Fels-Naphtha</i>	3 for 20c													
	8.1 oz	13	24.9	28.2	11.7	Phosphates Carbonates Silicates	0.11*	4.9	20.4	47.4		low	9.8	C
<i>Crystal White</i>	3 for 20c													
	7.8 oz	13.8	29.5	23.0	24.6	Carbonates Silicates	0.06*	0.4	none	39.0		med.	10.3	C
	4 for 27c													

<sup>1</sup>As labeled, except for bar soaps, which were weighed. Bar soaps do not carry a label statement of net weight; their weight varies considerably with atmospheric conditions and time.

<sup>2</sup>Including sodium chloride.

An "all-purpose" soap. *Ivory* met Federal Specification (P-S-616a) limits for floating white toilet soap; *Swan* nearly met this specification.

\*Indicates free alkali.

†Indicates free acid.

ener or makeweight. Federal specifications limit the amount present to 1% or less.

**Rosin.** Rosin has certain cleansing properties, but it tends to give soap a sticky feeling and may produce a yellowish color on clothes, particularly if they are boiled with soap in hard water.

**Degree of sudsing in cool water.** The amount of suds obtained by shaking 100 milliliters of a 1% solution of the soap at room temperature is an indication of the relative suitability of several soaps for laundering in low-temperature water.

**Residue retained on No. 12 sieve.** To meet requirements for powdered soap, the residue remain-

ing on a No. 12 sieve is restricted to 1.5%. (Granulated soaps may have as much as 2.0% remaining.) Consumers should note that there is a difference between powdered soap and soap powders; the latter are very strongly alkaline materials in which the soap content is relatively small, and are commonly used for cleaning tile or stone floors or steps and other rough surfaces.

For the convenience of readers who do not wish to study the detailed presentation in the accompanying tables, the following brief listings are given. The brands appear in the A, B, or C groups in order of increasing cost per pound of dry soap.

## Chip Soaps

### A. Recommended

*Nola* (Iowa Soap Co., Burlington, Iowa, and Camden, N. J.)  
*Bright Sail* (Distributed by The Great A & P Tea Co., N.Y.C.)  
*Kirkman Flakes* (Kirkman & Son, Div. of Colgate-Palmolive-Peet Co., Brooklyn, N. Y.)  
*Chifon* (Armour & Co., Chicago)  
*Ivory Flakes* (The Procter & Gamble Co., Cincinnati)  
*Lux Flakes* (Lever Bros. Co., Cambridge, Mass.)

### B. Intermediate

*Quick Arrow* (Swift & Co., Chicago)  
*Automatic* (Fitzpatrick Bros., Inc., Chicago)  
*Hershey's* (Hershey Estates, Hershey, Pa.)

### C. Not Recommended

*Chipso* (Procter & Gamble)  
*Speedup* (Distributed by American Stores Co., Philadelphia)  
*Kirk's American Family* (Procter & Gamble)  
*Baby Stuart* (Distributed by Sprague Warner, Chicago)

## Chip Soap, Rosin Type

### A. Recommended

*Fels-Naphtha* (Fels & Co., Philadelphia)

## Powdered Soap

### A. Recommended

*Ivory Snow* (Procter & Gamble)

## Powdered Soap, Built

### A. Recommended

*Magic Washer* (Iowa Soap Co.)

### B. Intermediate

*Super Suds* (Colgate-Palmolive-Peet)  
*Dus* (Procter & Gamble)  
*Kirkman Granulated* (Kirkman & Son)

### C. Not Recommended

*Oxydol* (Procter & Gamble)  
*Rinso* (Lever Bros.)  
*Silver Dust* (Lever Bros.)

## Bar Laundry Soap

### A. Recommended

*Kirk's American Family* (Procter & Gamble)  
*Octagon* (Colgate-Palmolive-Peet)  
*Kirkman* (Kirkman & Son)  
*Ivory* (Procter & Gamble)  
*Swan* (Lever Bros.)

### B. Intermediate

*P and G* (Procter & Gamble)

### C. Not Recommended

*Fels-Naphtha* (Fels & Co.)  
*Crystal White* (Colgate-Palmolive-Peet)

## Corrections and Emendations to Consumers' Research Bulletins

Signal Boosters  
for TV and FM  
Page 12  
Feb. '50 Bulletin

The prices given in the listings were net prices at radio mail-order dealers and some other dealers in many sections of the country. The amounts charged by most dealers, the so-called "list prices," are as follows:  
*Regency Signal Booster, Model DB-213*, \$30.  
*Anchor TV-Preamplifier, Model 101-50*, \$37.50.  
*Jerrold TV-FM Booster*, \$37.50.  
*Masco Television Booster, Model MTB-13X*, \$35.  
*RMS, Model SP-4*, \$37.50.  
*Regency Signal Booster, Model SB-98 (FM)*, \$20.  
(A new model will list at \$24.50.)

Sewing Machines  
Page 24, Col. 1  
Nov. '49 Bulletin

The present prices of the *Domestic* sewing machine, with head 153, according to recent information from the manufacturer, range from

\$187.95 to \$234.95 in delivery zone 1, and are slightly higher in zone 2 (reflecting greater distance from the factory in Cleveland), the highest price for any machine being \$244.95. The prices given in our November BULLETIN applied to machines delivered in zones 1 and 2 at the time the information for the article was obtained.

Drier Bags for National Watermatic Washing Machine  
Page 25  
May '48 Bulletin

The Associated Manufacturers, Inc., Waterloo, Iowa, has advised one of our readers by letter that their company, which for a time supplied rubber drier bags for the *National Watermatic* washing machine, can no longer do so. (The *National Watermatic* is a washer on which CR issued a favorable report about 13 years ago.) CR knows of no other source of supply for the bags.



## House and Barn Paints — II

**Editor's Note:** In CR's October 1949 Bulletin we presented the first of two articles on House and Barn Paints. The first article indicated certain kinds of paints that are to be avoided, and discussed the disadvantages to the consumer through the manufacturers' continuing use of less than the normal amount of linseed oil. It included also consideration of paint labeling and what can be learned from it, and the effect of reduced white lead content on paint quality.

The second and concluding article discusses paints which do not contain white lead and are especially suitable for certain locations; so-called one-coat house paints; the number of coats to be used with different types of paint; aluminum paint for priming purposes; the disadvantages of too-frequent painting; how to judge the condition of a deteriorated paint coating. In addition, listings are included of pure white lead paints, mixed-pigment prepared paints, and iron-oxide red barn paints.

**S**OME BRANDS of house paint now contain no white lead at all. The pigment then contains zinc oxide, titanium dioxide, and extenders. Such paints are often called "fumeproof" because they do not blacken in places where there is hydrogen sulfide in the air. They can be recommended for the few places (near water badly polluted with sewage or decaying materials, near sulfur springs, near some mine dumps, and near some industrial operations) where there actually is a significant amount of hydrogen sulfide in the air. Sulfur dioxide, which is far more common, does not blacken paints containing lead. The leadless TZ paints, however, are not recommended for general painting purposes. They are likely to chalk too freely, fade too badly, if tinted, and prove less reliable than TLZ paints. The real purpose in offering them is that the TZ paints are cheaper to make than the TLZ paints.

So-called "one-coat" house paints have recently appeared on the market. Not much is new about them except the name. They are not, as the prospective purchaser might suppose, for painting bare wood with a single coat. More careful reading of the directions on the label shows that they are, as one maker puts it, "a specially prepared one-coat finish for repaint work when the surface to be recoated is in good condition for repainting." Under such conditions a special paint is not needed; one coat of grade I house paint similar in composition to the paint used previously, applied at 600 to 650 sq. ft. per gallon, will do the job. The one-coat house paints examined so far are perhaps a grade better in quality than the oil-restricted paints of their maker's regular brand, but they are not yet grade I paints. Their appearance on the market, however, gives clear evidence of their makers' recognition that paints can be made of better

quality than the majority of the house paints now being sold.

For many years most new houses have received only two coats of paint, usually one of house-paint primer and one of house paint. When done with grade I paints applied generously enough to make a coating 4.5 to 5.0 mils thick when dry, such painting gives excellent service and normal durability. (A mil is .001 inch.) The primer should be applied so that a gallon is spread over no more than 450 sq. ft. and the finish coat a gallon for no more than 550 sq. ft. This is about as generously as paint can be applied in practice. Oil-restricted paints make coatings less than 4.0 mils thick and therefore less durable. Nevertheless two-coat practice has remained the rule and consumers have largely become accustomed to less than normal durability for first paint jobs. Paint advertising for some years has no longer claimed, as it formerly did, that two-coat painting is as durable as three coats at higher spreading rates. For those who can now obtain grade I paints again, the two-coat practice may be fully recommended once more. The allegedly new "one-coat" paints when used with house-paint primer of the same brand may be considered suitable for two-coat work, though not as satisfactory as they should be.

When fully oil-restricted paint is used, new wood should receive three coats. The first may be the house-paint primer of the same brand or it may be the finish paint thinned with a pint of linseed oil to the gallon and spread over 600 sq. ft. per gallon. Each of the other two coats should be applied without thinning at 650 sq. ft. per gallon. With oil-rich paint in three-coat work it is best to apply the house-paint primer for the first coat and each of the other coats may be thinned with a pint of mineral spirits to the gallon and spread over 700

sq. ft. per gallon.

If the wood is of a kind that does not hold paint well, such as southern yellow pine or Douglas-fir, it is best to apply aluminum house paint (*but be sure it is aluminum house paint for woodwork, not aluminum paint for metal, or aluminum enamel*) for the first coat, to be followed by two coats of paint of the desired color.

Existing houses should not be repainted more often than is necessary, seldom, if ever, more often than once in four years. Paint that is merely soiled or faded can be restored to reasonably fresh appearance by a good washing with water containing not over one teaspoonful of trisodium phosphate (or similar paint cleaner) per gallon. Even paint that is checked or cracked but is still firmly adherent can usually be washed and allowed to go a year or two before repainting. Whereas in painting new wood the common mistake is to apply too little paint, the common blunder in repainting is to repaint too soon and with too much paint. *There should be time enough between painting jobs for much of the coating to wear away.* Then the loss should be replaced by fresh paint without adding much more, for the best paints become unduly brittle and unreliable when the coating gets much more than 10 mils thick.

Serious break-up of paint coatings becomes imminent when the coating starts to loosen and curl up at the edges of cracks, or small pieces of coating begin to fall away. When such signs are to be seen fairly generally on the areas of the house most fully exposed to sunshine, it is wise to repaint. The best paint to use will usually be one having approximately the same composition as the paint applied the last time. It is not necessary to use exactly the same color, however, because most of the popular light colors are made by adding to a white paint very small proportions of colored pigments, proportions too small to alter seriously the chemical and physical properties of the paint.

Unless break-up of the coating has gone far enough to leave considerable areas of bare wood, the repainting can be done satisfactorily with one good coat of oil-restricted paint applied so that 1 gallon covers not more than 500 sq. ft. or with one coat of oil-rich paint at 600 sq. ft. a gallon. If there are fairly large areas of bare wood here and there, these bare areas can be touched up first with a spot-coat of paint thinned with about 1 pint of mineral spirits or turpentine per gallon, and then the whole house can be given a full coat of paint as recommended above.

Where the old coating is breaking up badly and there are areas of bare wood on many parts of the walls, all loose paint should be carefully removed with scraper, wire brush, or sandpaper, and two full coats of paint applied, each one at the

rate of about 600 sq. ft. per gallon for oil-restricted paint or 700 sq. ft. per gallon for oil-rich paint. The first coat may be thinned with 1 pint of mineral spirits or turpentine per gallon.

When paint bears the classification mark recommended by the U.S. Department of Agriculture<sup>1</sup>, consumers should remember that the classification is in three parts, *group*, *type*, and *grade*. The *group* shows the principal pigments by capital letters. Thus, group TLZ means oil-rich titanium-lead-zinc paint; oil-restricted paint with the same pigments is TLZ(e). Iron oxide (ferric oxide) barn paint is usually group F(e), indicating much bodied oil in the vehicle, or F(re) if the vehicle contains resin varnish. The *type* indicates the proportions of lead pigment and zinc oxide in the total pigment. Acceptable TLZ paints will nearly always be of types 2B, 3B, 3C, or 4C. In the type symbol the number refers to the percentage of lead pigment and zinc oxide, taken together, in the total pigment by volume as follows: 1, more than 80%; 2, between 60 and 80%; 3, between 40 and 60%; 4, between 20 and 40%; and 5, less than 20%. The letter refers to the ratio of lead pigment to zinc oxide by volume, A at least three times as much lead as zinc, B between three times as much and equal parts of lead and zinc, C between equal parts and 1/3 as much lead as zinc, and D less than 1/3 as much lead as zinc. The *grade* is based on content of equivalent opaque pigments, total pigment, and total nonvolatile (pigments, plus drying oils, plus resin, if any); grade 1 is the highest and grade 6 the lowest.

At present there is a tendency, when the classification is used, to overemphasize grade and underemphasize type. To be acceptable, however, white and tinted paints must be of suitable group and type regardless of grade. Paint of group TLZ, type 3B or 3C, is *A. Recommended* if of grade 1 or grade 2 but is *B. Intermediate* if of grade 3. Group TLZ, type 4C, is *A. Recommended* if of grade 1 and *B. Intermediate* if of grade 2 or 3 provided the lead and zinc amount to at least 30% by volume of the total pigment, but less than 30% is usually considered *C. Not Recommended* regardless of grade. Red barn paint and other paints of dark colors that cannot contain much white lead or zinc oxide are necessarily of type 5 and, because they lack lead and zinc, they usually need bodied oil or varnish in the vehicle, indicated by (e) or (re) in the group symbol.

Paints are listed as of the spring of 1949. Changes may be made in the industry at any time, most often in the late fall or winter. There is no reason to expect, however, that changes at this time will be more numerous or more radical than usual.

<sup>1</sup>In Technical Bulletin No. 804, "Classification of House and Barn Paints as Recommended by the United States Department of Agriculture," 10c, from Supt. of Docs., Washington 25, D.C.

## Pure White Lead Paint, Group L, Type 1A, Grade 1

### A. Recommended

*Anaconda White Lead Paste* (Anaconda Sales Co.)  
*Carter White Lead Paste* (National Lead Co.)  
*Dutch Boy Soft White Lead Paste* (National Lead Co.)  
Also *Dutch Boy Liquid White Lead*, which is pure white lead in prepared form. *Dutch Boy Blended* paint, however, is group TLZ.  
*Eagle White Lead Paste* (Eagle-Picher Co.) Also *Eagle RTU White Lead*, which is pure white lead in prepared form. *Eagle RTU Mixed Paint*, however, is group TLZ.  
*Pioneer Paste White Lead* (W. P. Fuller & Co.)  
*SW ODP White Lead Paste* (Sherwin-Williams Co.)

## Mixed-Pigment Prepared Paint

### A. Recommended

Paint bearing the brand of an established manufacturer and also marked on the label with the group, type, and grade and the phrase "classified according to the recommendations of the Dept. of Agric., Tech. Bul. No. 804," provided it is group TLZ type 3B or 3C, grade 1. The type may be 4C provided the sum of the white lead and zinc oxide is at least 30% of the total pigment by volume (Dept. of Agric. classified paints give the formula both by weight and by volume). The following manufacturers made classified trade brand paint when this list was prepared, but more may now be doing so: Diamond Products Co., Marshalltown, Iowa; Forman, Ford & Co., Minneapolis; Rockford Paint Mfg. Co., Rockford, Ill.; Seck-DeVault Paint Co. (Springfield Paint Mfg. Co.), Springfield, Ill.; N. Josten & Co., Milwaukee; Midland Cooperative Wholesale, Minneapolis; Aldag Paint & Varnish Co., Indianapolis.

Unclassified paints of the following brands, which are group TLZ, type 3B, grade 2, and contain at least 4½ lb. of drying oil a gal. except as otherwise noted.

*BPS* ("Best Paint Sold") (Patterson-Sargent Co.) Directions call for too much thinning.  
*Dutch Boy Blended* (National Lead Co.)  
*Eagle RTU Mixed Paint* (Eagle-Picher Co.) Type 2A, grade 3.  
*Gibbs Outside Gloss Paint* (Gibbs Paint Mfg. Co.)  
*Jewel Doublequick* (Jewel Paint Co.)  
*Mautz New Intense White and Superwhite Paste* (Mautz Paint & Varnish Co.) Type 4C and 4B, respectively, tints are type 2B.  
*Outside Barreled Sunlight* (U. S. Gutta Percha Paint Co.) Type 4C.  
*Porter Perfect Paint* (Porter Paint Co.)  
*Ward's Super House Paint* (Montgomery Ward & Co.) Type 4C. 4-1/3 lb. of oil a gal.

### B. Intermediate

The following are group TLZ(e), type 4C, grade 3, and contain about 3¾ lb. of drying oil a gal., except as otherwise noted.

*BLP* ("Beautiful, Lasting, Preservative") *Mixed Paint* (Mobile Paint Mfg. Co.) Tints are type 4D.  
*Carmote* (Carpenter-Morton Co.)  
*Du Pont* (E. I. duPont de Nemours & Co.) Grade 2 with 4¼ lb. of oil a gal. but slightly low in lead and zinc.

*Endurance and Endurance Imperial One-Coat* (Glidden Co.)  
*Fuller Pure Prepared* (W. P. Fuller & Co.) White is type 3C; tints, 4C.

*High Standard* (Lowe Bros. Co.) Tints are grade 2, with 4 lb. of oil a gal.

*Kyanize Super Service* (Boston Varnish Co.)

*Lionoil Processed* (Berry Bros.) Group TZ(e), grade 2; another formula reported is group TLZ(e), type 4C, grade 3.

*Lucas TG* (John Lucas & Co. Inc.)

*Monarch* (Martin-Senour Co.)

*Multitint* (Seidlitz Paint & Varnish Co.) 4¼ lb. of oil a gal.

*O'Brien's Prepared* (O'Brien Corp.) 4 lb. oil a gal.; tints, type 3C.

*Pratt & Lambert* (Pratt & Lambert, Inc.) 4¼ lb. of oil a gal.; another formula reported is type 3C.

*Protexit* (Hooker Glass & Paint Mfg. Co.) White is grade 2 with 4 lb. of oil a gal.; tints are group LZ, type 2B, grade 3, with 5 lb. of oil a gal.

*Seroco Master-Mixed No. 143 White* (Sears, Roebuck & Co.) 4 lb. of oil a gal.; but the tints and No. 243 White are type 5, with 3½ lb. of oil a gal. and are not recommended.

*SWP* (Sherwin-Williams Co.) White is type 3C; tints, type 4C; tints have 4 lb. of oil a gal.

*Vita-Var 100% Pure* (Vita-Var Corp.) White, 4 lb. of oil a gal., but tints are type 5, grade 2, 3¾ lb. of oil a gal. and are not recommended.

## Iron Oxide Red Barn Paints

As previously stated, red barn paints are type 5. They are usually group F(e) or group F(re) but when a little zinc oxide is added to make them more resistant to mildew they are group FZ(e) or FZ(re). Leaded zinc oxide used for a similar purpose makes them group FLZ(e) or FLZ(re). High-grade red barn paint is sold by some farmers' cooperatives and by some of the manufacturers now using the Dept. of Agric. classification.

### A. Recommended

Paint bearing the brand of an established manufacturer and also marked on the label with the group, type, and grade with the phrase "classified according to the recommendations of the United States Department of Agriculture, Tech. Bull. No. 804," provided it is grade 1 or grade 2. The following manufacturers made classified trade brand paint of grade 1 when this list was prepared: Diamond Products Co., Marshalltown, Iowa; Forman, Ford & Co., Minneapolis; Midland Cooperative Wholesale, Minneapolis; Mautz Paint & Varnish Co., Madison, Wis.

### B. Intermediate

Except for those mentioned above, red barn paints are nearly always grade 5 or grade 6. For lack of better paints, the following grade 5 paints are given the B-Intermediate rating.

*Commonwealth Red Barn* (Sherwin-Williams Co.)

*Devoe Roof Barn and Bridge* (Devoe & Reynolds Co., Inc.) But not their *Standard Red* or *Derazo English Red Oxide*.

*Lucas Bright Red No. 66* (John Lucas & Co. Inc.)

*Seroco Master-Mixed No. 815* (Sears, Roebuck & Co.) But not their *Barn Paint, No. 800*.

## Some Suggestions for Hand Firing Solid Fuels

**D**ESPITE the increasing popularity of automatic firing equipment (oil and gas burners, coal stokers), three out of four American householders are still firing some type of solid fuel by hand, and in spite of the discouraging behavior of the coal miners' union leadership, a good many householders will doubtless continue to install coal-burning equipment. In most instances, improved results and greater economy in burning of coal would be achieved by adherence to a few very simple fundamental rules of firing. Firing is easier, requires less time and attention, if it is done properly. Even in instances where satisfactory results are being obtained, the consumer will be well repaid by reviewing the following suggestions to be sure that no important point of fuel, heat, or labor saving is being overlooked.

### Bituminous Coal

Bituminous coal is by far the most widely used domestic fuel, accounting for approximately half of all fuel used in homes having central heating plants and one-third of the fuels used in parlor stoves or space heaters.

While the proper method of firing bituminous coal varies to some extent with the type and size of coal and design of equipment, the Pittsburgh Bureau of Smoke Prevention, and in fact most engineers, recommend that, when adding fresh coal, most of the bed of live coals should be pushed to the back of the furnace with a long iron hoe, and the front of the furnace then filled with the fresh coal. The purpose is to provide for first reducing the fresh coal to coke, burning off the volatile matter of the coal (gases and vapors) as it passes back over the hot coals, rather than allowing it to pass out of the stack as smoke. The old fire should never be covered completely, but a "hot spot" of glowing coals must always be left on top to act as a torch for the live gases as they pass back over the fuel bed. This is not merely desirable; it is essential for the safety of those who live in homes where coal is burned.

With bituminous coal, it is essential that adequate air be provided over the fire to burn all combustible gases as they arise. The butterfly or slide damper in the fire door is important for supplying this air and should be open or partly open at all times, particularly immediately after firing fresh coal. With anthracite, this damper is not so important, except just after firing a heavy charge of coal.

### Anthracite Coal

Anthracite is the most popular of the domestic fuels in the North Atlantic States and New England. With the egg, stove, and chestnut sizes, it is in order to fire the new coal evenly over the entire surface of the fuel bed at each charging. With pea and buckwheat, a hot spot of glowing coals at least 5 or 6 inches square, or its equivalent, should be left on the surface of the fuel bed after each charging, to burn off all combustible gases as they accumulate, to avert minor explosions and "puff-backs." (See cautionary note under "Bituminous Coal.") In practice, the hot spot is usually left by alternately adding new coal at the front and then at the back with each successive charging. A good general rule with the larger sizes of anthracite, a rule which applies to most furnace designs, is to fire normally to the level of the bottom of the fire door. In mild weather, firing can be a little deeper, and in severe weather, and with the smaller sizes of coal, a little shallower.

### Coke

Coke is fired and burned in almost the same way as anthracite except that, because of its much greater bulk, it should be fired in a much deeper layer at each firing, and the furnace should be virtually filled when banking. Also, when firing coke, it is well to always leave some ash on the grates at the bottom of the fire, as the low ash content of coke often results in damage to the grates from excessive heat. To avoid burning the coke too rapidly, it will often be necessary to cut down the draft considerably.

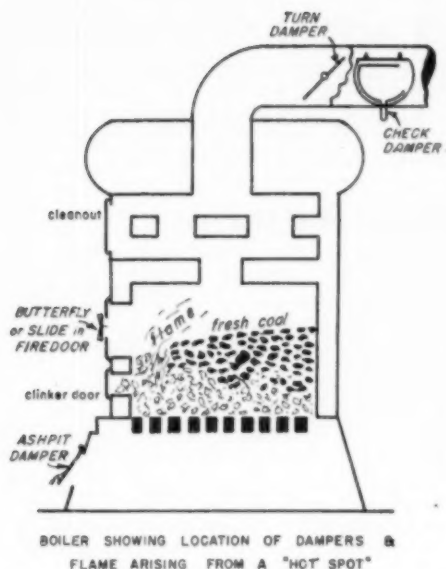
### In General

*It is important not to fire too much coal at a time.* Small amounts at short intervals give the best results. Do not stir either an anthracite or a bituminous coal fire with a poker at any time; with anthracite, stirring causes clinker; with bituminous coal, it causes both clinker and smoke. Garbage or waste should never be burned on top of a fire; to do so invites formation of clinker. In removing a clinker, avoid disturbing the fire any more than is necessary, and avoid mixing live coal and ash.

### Adjustment of Drafts

Aside from the slide or "butterfly" in the fire door, which has been described under "Bituminous Coal,"





every domestic furnace should have three basic dampers, a turn damper and a check damper in the smoke pipe and an ashpit damper, commonly called the "draft door."

The *smoke pipe or turn damper* is strictly a seasonal damper to be used only for a general reduction of the stack draft whenever the weather is cold enough to make the draft too strong, so that the fire burns too rapidly. Day-by-day use of this damper is to be avoided. In many cases, once this damper has been set correctly in view of the characteristics of the particular chimney, it need not be touched from one year to the next.

The *ashpit damper*, or *draft damper*, as it is better termed, should be the chief control of the fire with any fuel. Opening it wider allows more air to pass through the fire, giving correspondingly higher rates of combustion; closing it retards the fire. Sudden closing of this damper after having maintained a hot fire should be avoided as it will promote formation of clinker. It is well to provide a stop on this damper so that, in its nominally closed position, it will actually be held open about one-eighth of an inch; by this means one avoids ever entirely shutting off the air supply to the fire.

The *check damper* in the stack provides the same general effect as the ashpit draft and is often tied to it for simultaneous operation. Opening the check damper reduces the rate of burning by admitting air from the cellar direct to the stack. Its use "satisfies" the draft demand of the chimney without passing the air through the fire. However, as this air has been heated to cellar tempera-

ture, and thus wastes useful heat up the chimney, control of the fire by the check damper is less desirable than by the ashpit draft, if use of the ashpit draft alone will suffice. It may be the case, however, that inability to bank the fire low enough in mild weather can be traced either to the absence of a check damper, or to one of inadequate size.

The *fire door* is definitely not a damper, and it should never be used as such. Opening the fire door to bank the fire wastes heat. If the furnace will not bank low enough or hold overnight without opening the fire door, a check damper should be installed in the stack or the existing one enlarged.

One of the most important things to remember in hand-firing solid fuels, particularly anthracite, is that, for any given weather conditions, a damper position can be found that will proportion the output of the boiler to the need for heat and thus eliminate the need for frequent draft adjustments. The number of trips to the cellar can be reduced to those needed for addition of coal, by determining and maintaining these positions. Make damper adjustments in small increments, and allow full time for the effect of such changes to be felt before making further adjustments.

Automatic thermostatically-controlled damper regulators are available at reasonable prices (usually around \$25) to take over the chore of damper regulation.

### Grate Shaking

The greatest single fault in hand firing is the tendency to shake the grates too often and too much. Except in severest weather, once a day should be often enough; even then, they should be shaken only until, when looking upward toward the grates, a slight red glow is visible. Live coals falling into the ashpit are a sure sign that the shaking has been too energetic or too prolonged. Over-shaking wastes coal to the ashpit with a direct loss of fuel. Whenever ash sifting seems necessary, it is a sure sign that the coal has been wrongly distributed in firing, that the grates have been shaken too much, or that they are defective. If the grates are defective, they should be repaired; it is easier and cheaper in the long run than sifting ashes. Finally, excessive black material in the ash is seldom slate; it is much more often charred, dulled, partially burned coal that could have been burned completely.

### Depth of Fuel Bed Important

Many persons carry thin fuel beds in mild weather and thick beds in severe weather in the belief that the rate at which coal is burned is proportional to the amount present in the furnace. Nothing could be further from the facts. A thin fuel bed allows much more air to pass through the fire and burns

it up faster. Thus, contrary to the views of many, thin fuel beds should be used only when the furnace is required to produce the greatest practicable output of heat. To fire coal frugally, that is, in thin layers, when only a small amount of heat is needed is wasteful. (This is not in contradiction to the instructions previously given, to fire bituminous

coal lightly and often, since it is the depth of the fuel bed that controls [inversely] the rate of burning and not the amount of coal added at each charge.) Once a deep fuel bed has been built up, new coal can be added in as small amounts as desired without waste, as was recommended in discussing the firing of bituminous coal.

## Automobile Storage Batteries

CR's recent tests of 11 storage batteries followed essentially the procedure used in the tests reported in the October 1948 BULLETIN. Determinations were made to check the maker's ampere-hour rating, in which each battery was discharged at an 8-hour rate (3 cycles) and at a 20-hour rate (2 cycles). For test purposes, the rate of discharge in amperes is determined by dividing the manufacturer's ampere-hour rating of the battery by the number of hours (8 or 20 in this case) during which the battery should supply that current and at the same time maintain its terminal voltage above 5.1 volts. The ampere-hour ratings in the listings in all cases are for the 20-hour discharge rate. The first figures in parentheses following the manufacturers' ampere-hour ratings were the actual average ampere-hour capacities at the 20-hour rate. The low temperature cranking ability was also measured, by determining the time in minutes that the battery, cooled to 0°F, delivered 300 amperes before reaching a terminal voltage of 3.0 volts. The second figures in the parentheses give the time in minutes during which the battery (operating at a temperature of 0°F) supplied current at the 300-ampere rate before its voltage dropped to 3 volts (average of the two runs).

A battery recently purchased by CR has given a clear indication that dealers' stocks may often be far from fresh; that, indeed, the dealer may not understand the importance of rapid turnover and of keeping the batteries in stock fully charged until they are sold. Some dealers do not even know that a battery deteriorates on standing when not in use. On this account there is no certainty of obtaining a first-rate battery even though it may be one of a well-known brand name that has performed well in tests. In buying a new battery, therefore, it would be a wise precaution to have each of its three separate cells checked to obtain an indication of its state of charge and not to purchase any battery in which one of the three cells shows a reading of voltage and specific gravity greatly different from that of the other two cells, or in which any cell shows a specific gravity reading below 1.250.

The listings are based primarily upon cranking power at 0°F (since a most likely fault of a deficient battery would be its failure to give proper cranking

power at a low temperature) and upon whether the battery conformed to the manufacturer's ampere-hour rating. The results of the tests at the 8-hour discharge rate were also considered, since it is felt that such a rate more nearly approximates the drain on the battery in a modern automobile having a radio, heater, brake and back-up lights, direction signals, and often various other electrically-operated accessories. The Sears *Allstate Super* would have received an *A-Recommended* rating if it had not been overrated by the manufacturer. An asterisk (\*) following a number in the parentheses indicates that a figure is considerably below accepted specifications.

### A. Recommended

- Auto-Lite PN-15* (Electric Auto-Lite Co., Toledo, Ohio) \$20. Rated 100-amp.-hr. (105.3 — 3.6.) 3  
*Mobil Deluxe W451* (Socony Vacuum Oil Co., 26 Broadway, New York City) \$18.35. Rated 100-amp.-hr. (107.2 — 4.0.) 45 plates. 3  
*Prest-O-Lite, Type M1-15* (Prest-O-Lite Battery Co., Sub. of The Electric Auto-Lite Co., Toledo, Ohio) \$17.40. Rated 100-amp.-hr. (106.8 — 3.8.) 45 plates. 3  
*Winter King Heavy Service, Type H2L* (Montgomery Ward's Cat. No. 61—6303F) \$20. Thirty-month guarantee. Rated 120-amp.-hr. (124.5 — 5.0.) 57 plates. 3

### B. Intermediate

- Allstate 70* (Sears-Roebuck's Cat. No. 28—70F) \$10.50. Eighteen-month guarantee. Rated 90-amp.-hr. (97.7 — 2.7.) 45 plates. 1  
*Commander* (Montgomery Ward's Cat. No. 61—6321F) \$9.50. Twelve-month guarantee. Rated 90-amp.-hr. (89.6 — 3.2.) 1  
*Allstate Super 85, Type 2M* (Sears-Roebuck's Cat. No. 28 — 85F) \$19. Thirty-month guarantee. Fell below manufacturer's rating of 130-amp.-hr. (125.0 — 4.9.) 57 plates. 3  
*Firestone L151* (Firestone Tire & Rubber Co., 1200 Firestone Parkway, Akron 17, Ohio) \$20. Rated 100-amp.-hr. (100.5 — 3.3.) 3

### C. Not Recommended

- Cadet* (Cadet Storage Battery Co., Philadelphia) \$15.50. Thirty-month guarantee. Rated 100-amp.-hr. (102.9 — 2.3\*) 45 plates. 2  
*Exide Standard Duty* (The Electric Storage Battery Co., 1945 Allegheny Ave., Philadelphia 32) \$20. Rated 100-amp.-hr. (103.9 — 2.3\*) 3  
*Willard Heavy Duty* (Willard Storage Battery Co., 246 E. 131 St., Cleveland) \$20. Rated 100-amp.-hr. (105.7 — 2.7\*) 45 plates. 3

## Aluminum Storm Sash-Screen Combination

**I**N PREVIOUS ARTICLES, CR has discussed the desirability of storm windows. Heat loss through windows represents a sizable proportion of the total heat loss in the home, and the window heat loss may be reduced by approximately one-half by using properly installed storm windows. The result, of course, will be an appreciable saving of fuel (up to about 12% for storm windows and storm doors combined). When storm windows are used, the temperature at the inside window will be high enough so that the moisture condensation on the glass will be greatly reduced. More important to some people is the added comfort produced by the diminished tendency to drafts in the room.

A general discussion of the features of several types of combination storm sash and screens and listing of 18 wood and metal models appeared in the November 1948 CR BULLETIN.

A nationally-advertised all-aluminum combination besides those mentioned in the November 1948 BULLETIN is that of the Burrowes Corp., Portland 3, Maine, listed below. This company, itself, appears not to exercise any very direct con-

trol over individual installations. While the local dealer may have mechanics fully competent to do this work, the consumer would be wise to check on this point locally, as by talking to other owners and examining their installations before placing an order. In doing so, he should remember that the utility of any storm sash is never any better than its installation, for a loosely or carelessly fitted sash is fairly sure to mean poor value for the expenditure.

### A. Recommended

*Burrowes Combination Storm Sash and Screens* (The Burrowes Corp., Portland 3, Maine) \$26.70 for typical window with 26 in. x 48 in. opening, including 2 half-storm-sash and 1 half-screen (self-storing feature adds \$2, for all sizes). Two standard types, self-storing and non-self-storing. Sash and screens are readily removable from inside on both types. Special models available for many types of special windows such as casement, etc. Burrowes' prices include installation. Deduct 10% from price if screen is not wanted; add 20% to list if 2-screen sash are desired.

## Whose Plastic Table Cover and Vanity Tray? Where Were They Made? Who Stands Behind Them?

**T**HERE IS an important omission in the information included on the slips reproduced below that accompanied a plastic cloth and vanity tray purchased for CR. *Both failed to give the name and address of the manufacturer.* (The vanity tray was one that had ample room for permanent

embossing of the name of the manufacturer and his full address.)

Claims and guarantees are of little value to anyone if there is no one to be held accountable for the product's failure to make good or to satisfy the purchaser.

### Plastic Table Cover

SIZE  
54 x 54  
INCHES

- NON-INFLAMMABLE
- WATER-PROOF
- STAIN-RESISTANT
- WILL NOT CRACK
- WILL NOT PEEL
- WIPES CLEAN WITH A DAMP CLOTH

SOFT IN TEXTURE — STRONG, LONG LASTING,  
VERY PRACTICAL AS IT WILL SAVE ON LAUNDRY  
BILLS.

## Vanity Tray

*A Tray of great utility*

Cosmetic - Make Up

Toilet Articles

Sewing Accessories

When two products appear to be equal in value, so far as can be judged, it is wise always to choose the one whose manufacturer identifies himself clearly and shows his complete name and address.

Be wary of incomplete addresses, such as the "Vampire Camera Co., New York." CR has found in a number of instances that an incomplete address may be used to conceal a company which, in case of intended legal action or other emergency, cannot be found. A company which is ready to accept responsibility for its products will be glad

to give an address that will call for no directory searching or detective work on the part of the buyer. This point is of special importance in any case where hazard to the user or others may be involved in the use of the article, e.g., an electrical appliance, a drug or cosmetic product, an insecticide or fungicide. The name of a department store, mail-order house, or other retail outlet is *not* a sufficient substitute for the name and address of the actual manufacturer or responsible original marketer and advertiser.

## Flashlight Batteries

THE most important characteristic of a flashlight battery is the length of time during which it can supply sufficient power to light the lamp bulb. CR's test included six cells each of six nationally known brands of type D batteries. Four of the six brands were known to be fresh cells but the makers of the other two brands (*General* and *Ray-O-Vac*) unfortunately did not follow the sound practice of showing expiration dates on the labels of their cells. This is a serious fault since the consumer has no idea whether an unmarked battery is from relatively fresh or old stock or whether it is still capable of giving even reasonably good service. All flashlight batteries, regardless of claims to the contrary, will lose a substantial part of their serviceability within two years after date of their manufacture.

The *General* and the *Ray-O-Vac* cells were labeled as "leakproof." These cells apparently were designed with stronger cases than usually supplied, with the idea of preventing swelling and consequent damage to the flashlight or other equipment in which the battery is used. The *Ray-O-Vac* Co. gives a guarantee on the cell stating that it will replace any flashlight damaged by the corrosion of a *Ray-O-Vac* cell. Since two *Ray-O-Vac* cells did leak slightly after a period of four months under humid conditions, it appears that the guarantee may be one of a much-used type of "money back" advertisement which the advertiser feels safe in offering because he expects only a small number of people to take advantage of it. A nationwide survey made and published about two years ago by a competing manufacturer disclosed that about 9% of the so-called "leakproof" flashlight batteries examined were found to be leaky in fact. Thus, regardless of any claims made for dry cells, it is always advisable to remove the cells from a flash-

light or other instrument whenever it is to be left unused for a considerable period.

The batteries tested were discharged through a resistance of 4 ohms for 4-minute periods beginning at hourly intervals for 8 consecutive hours each day. This procedure, which accords with standard specification requirements, was followed until the closed circuit voltage of the cell fell below 0.9 volts.

The ratings are based upon the average life value of the 6 cells of each brand tested, the extent of deviation of individual cells from the average life value of the 6 cells, and whether or not the cell was dated.

### A. Recommended

*Burgess, No. 2* (Burgess Battery Co., Freeport, Ill.) 10c.

Average life, 900 minutes, good.

*Eveready, No. 950* (National Carbon Co., Inc., 30 E. 42 St., N.Y.C.) 10c. Average life, 855 minutes, good.

### B. Intermediate

*Bright Star, No. 10M* (Bright Star Battery Co., 198 Getty Ave., Clifton, N.J.) 10c. Average life, 670 minutes, fair.

*Ray-O-Vac, No. 2LP* (Ray-O-Vac Co., 110 E. Washington Ave., Madison 10, Wis.) 10c. No expiration date given (very undesirable practice). Average life, 875 minutes, good.

### C. Not Recommended

*General Leakproof* (General Dry Batteries, 13000 Athens Ave., Cleveland) 10c. No expiration date given (very undesirable practice). Average life, 475 minutes, poor (the several cells showed large deviations from average life).

*Winchester, No. 1511* (Winchester Repeating Arms Co., Div. of Olin Industries, Inc., New Haven 4, Conn.) 10c. Average life, 530 minutes, poor (cells showed large deviations from the average).

## Off the Editor's Chest

(Continued from page 2)

salt is customarily used is a completely unexplored field. Now we find the U. S. Department of Agriculture in its Food and Home Notes, February 8, 1950, cooperating with "groups concerned with national health" in a campaign to bring about the general use of iodized salt because it is "the simplest, most practical and least expensive way to make sure that all people, especially growing children, have the iodine they need."

No doubt this crude and unscientific approach to the problem of remedying a dietary deficiency in certain sections of the country is prompted by a desire to see that all who lack some desirable food material have their needs satisfied, but it reflects neither good science nor sound nutrition. In December 1933, Dr. H. J. Almquist of the University of California had occasion to warn against the fad of eating iodine-rich eggs. In their zeal to help humanity in iodine-deficient areas, poultrymen had introduced a method for feeding hens to produce eggs with a high iodine content. The doctor at that time pointed out that it did not follow that because a little iodine might be helpful, a larger dose was desirable. An excellent warning against such blunderbuss methods for the prevention of goiter was sounded by Dr. J. Thompson Stevens of New York in his book "The Control of Goiter" (A. S. Barnes Co., 1938) when he pointed out that individuals show a wide range of variations in their tolerance to iodine. Some people can ingest a very small quantity without ill effect, while others find that an equivalent dosage makes the action of their thyroid glands speed up greatly. Dr. Stevens reported that while iodine prophylaxis had met with considerable success in reducing the incidence of goiter in certain regions in Switzerland, particularly with children, some authorities maintained that *the general use of iodized salt in Switzerland had resulted in a great increase in hyperthyroidism (excessive functional activity of the thyroid gland).*

In 1939, the foreign abstracts section of the Journal of the American Medical Association carried a warning against indiscriminate use of iodized foods and medicaments. Most startling of all was a study by Dr. Isidor Greenwald of New York University College of Medicine, briefly reported in Science News Letter, February 8, 1947, in which he asserted that the lack of iodine is not the cause of goiters. Dr. Greenwald advanced the theory that since the amount of iodine in goiters and enlarged thyroid glands is as great as or greater than that found in normal glands, the disease cannot be ascribed to lack of iodine. Furthermore Dr. Green-

wald stated that on the basis of published reports it can be demonstrated that giving iodine to people in the so-called goiter belts has not reduced the incidence of new goiters to zero as one would expect if the theory were soundly based.

Dr. G. W. Monier-Williams, eminent British authority on trace elements in food, and author of the leading work on that subject, recognizes the danger of any method of introducing iodine into the food supply, or into the water supply (which has been dosed with iodine-containing salts in some places) that would allow no escape to persons who do not require the extra iodine. In that connection he comments: "Iodides have been added to public water supplies in several places in the United States and also in England, but this practice has the disadvantage that those who may be particularly susceptible to iodine dosage cannot avoid it."

He refers unfavorably to the use of iodized wrappers on fruits and possibly other foods, pointing out that even this practice might cause a daily intake of iodine sufficient to raise the question of ill effects upon health. He also calls attention to objections advanced by scientists, expert in the field, to the habitual ingestion of small quantities of iodine by adults and to the fact that hypersensitivity to iodine is fairly common among adults. It is children and adolescents that have particular need for a certain very minute intake of iodine. Obviously, therefore, even if the habitual use of iodized salt is assumed to be desirable for children, there would be a definite risk to some unknown proportion of the grown persons in the population.

A further factor is that at present there is no one who knows where is the limit between a safe dosage of iodine and a dangerous amount, even for the average individual. Since the practice in different countries has varied all the way from 5 or 10 parts per million to 200 parts per million, even more, in iodized salt, the reader may gauge the extreme uncertainty of expert opinion on the safe dosage limits for iodine in table salt.

Just why the U. S. Department of Agriculture is taking part in a crusade to get more people to use iodized salt is a little hard to figure out. Iodine is not an agricultural product but a mineral that is found in the soil in most parts of the country; the foods that contain the highest proportion of iodine are sea fish and shell fish, including cod fish, oysters, clams, shrimp, and salmon. One would think that it would be much more logical for the U. S. Department of Agriculture, if it must promote



something, to encourage the eating of various sea foods in the so-called goiter sections, or indeed the greater consumption of these products by everyone, if they are certain more iodine in the diet is really desirable.

It should be noted in this connection that the U. S. Department of Agriculture is not distinguished for the wisdom of its pronouncements in matters of health. For years it has advocated the increased use of whole-grain cereals, in spite of the fact well known to physicians that the roughage of the grain husk is not well tolerated by many people. At a National Nutrition Conference for Defense in 1941, according to one of the food trade journals, a businessman who attended was so impressed with the enthusiastic governmental pronouncements in favor of wholewheat bread that he promptly took to eating it; the result was that after a week he was sent to a hospital for treatment. No doubt a good many others who have followed the same advice have suffered similarly, and possibly did not have the advantage of such skilled and competent medi-

cal diagnosis of their trouble.

If the U. S. Department of Agriculture's press release advocating the use of iodized salt for everyone is filed in the wastebasket by the editors on the Department's big mailing list, then no great harm will be done. If, however, the U. S. D. of A.'s action lends backing to such overzealous legislators as State Senator Thomas C. Desmond, of Newburg, New York, or Congresswoman Frances Bolton of Ohio, both of whom have supported legislation to make the incorporation of iodine in table salt mandatory, it will be rendering a grave disservice to taxpayers who support its activities and to a great many people who neither need nor want the added mineral in their diet, and prefer to rely on their personal medical advisers for medical advice and prescriptions. If all table salt is required to contain iodides, those who have an idiosyncrasy to iodine will be at a great disadvantage, and may find it necessary to go to great pains and expense to obtain the salt they need, free of iodine, on a prescription basis.

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# RATINGS of MOTION PICTURES

**T**HIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

*Box Office, Charm, Chicago Daily Tribune, Cue, Daily News (N.Y.), The Exhibitor, Harrison's Reports, Motion Picture Herald, National Legion of Decency List, Newsweek, New York Herald Tribune, New York Times, Parents' Magazine, Release of the D.A.R. Previews Committee, Successful Farming, Time, Variety (weekly), Weekly Guide to Selected Motion Pictures (National Board of Review of Motion Pictures, Inc.), and Unbiased Opinions of Current Motion Pictures which includes reviews by the General Federation of Women's Clubs, the American Legion Auxiliary, National Film Music Council, and others.*

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), or C (not recommended) on its entertainment values.

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

ad—adventure  
 bio—biography  
 c—in color (Technicolor, Cinecolor, Trucolor, Magnacolor, Vitacolor, etc.)  
 car—cartoon  
 com—comedy  
 cri—crime and capture of criminals  
 doc—documentary  
 dr—drama  
 fan—fantasy  
 his—based on historical incident  
 mel—melodrama  
 mus—musical  
 mys—mystery  
 rom—romanticization of a novel  
 soc—social-problem drama  
 trav—travelogue  
 war—dealing with the lives of people in wartime  
 wes—western

A	B	C		
—	6	9	Abandoned (Woman).....	soc-dr A
—	4	4	Across the Rio Grande.....	wes AYC
—	5	1	Adam and Evalyn.....	dr A
3	7	5	Adam's Rib.....	com A
4	10	3	Adventures of Ichabod and Mr. Toad, The.....	mus-car-c AYC
1	4	2	Affair Blum, The.....	dr A
—	4	4	Alias the Champ.....	com A
7	6	5	All the King's Men.....	soc-dr A
11	3	3	Always Leave Them Laughing.....	com A
—	5	2	Amazing Mr. Beecham, The.....	com A
—	7	3	Ambush.....	wes AYC
—	2	11	And Baby Makes Three.....	com A
—	3	2	Angels in Disguise.....	cri-mel A
—	1	3	Angels of the Streets.....	dr A
—	5	—	Apache Chief.....	mel A
—	3	—	Aa You Like It.....	com AY
—	5	3	Astonished Heart, The.....	dr A
—	4	5	Backfire.....	mel A
—	2	6	Bagdad.....	ad-c A
—	7	2	Bandit King of Texas.....	wes AYC
—	3	1	Bandits of El Dorado.....	wes A
—	3	1	Baron of Arizona, The.....	hist-mel A
1	2	2	Battle of the Rails, The.....	war-dr A
5	7	3	Battleground.....	war-dr A
—	1	4	Belle of Old Mexico.....	mus-com-c A
—	5	2	Bells of Coronado.....	mus-wes-c AYC
—	2	12	Beyond the Forest.....	dr A
—	2	6	Bicycle Thief, The.....	dr A
—	8	5	Big Wheel, The.....	mel A
—	3	2	Black Book, The.....	mel A
1	2	3	Black Hand, The.....	cri-mel A

A	B	C		
—	2	3	Black Midnight.....	wes AYC
—	2	6	Black Shadows.....	doc-c A
—	5	3	Blonde Bandit, The.....	cri-mel A
—	5	1	Blondie's Hero.....	com AYC
3	3	—	Blue Grass of Kentucky.....	dr-c AYC
—	4	7	Bodyhold.....	dr A
—	6	1	Bomba on Panther Island.....	mel AYC
—	5	3	Borderline.....	cri-mel A
—	9	7	Bride for Sale.....	com A
—	1	2	Call of the Forest.....	dr AYC
—	4	6	Captain China.....	mel A
—	2	2	Catskill Honeymoon.....	mus-com A
2	8	1	Chain Lightning.....	mel A
—	6	3	Challenge to Lassie.....	dr-c AYC
—	4	1	Champagne for Caesar.....	com A
—	1	3	Child of Man.....	dr A
—	4	2	Children, The.....	dr AYC
—	6	5	Chinatown at Midnight.....	cri-mel A
1	5	11	Christopher Columbus.....	hist-dr-c AYC
7	6	—	Cinderella.....	mus-car-c AYC
—	4	4	Conspirator, The.....	mys-mel A
—	1	3	Counter Investigation.....	mel A
—	4	1	Cowboy and the Indians, The.....	mus-wes-c AYC
—	4	—	Cowboy and the Prize Fighter, The.....	wes-c AYC
—	3	—	Cowtown.....	mus-wes AYC
—	—	5	Cry Murder.....	cri-mel A
—	3	4	Dakota Lil.....	mus-pes-c A
—	1	5	Dalton Gang, The.....	wes A
3	10	1	Dancing in the Dark.....	mus-com-c A
—	1	8	Dangerous Profession, A.....	cri-dr A
—	3	2	Davy Crockett, Indian Scout.....	wes AYC
—	4	6	Deadly is the Female.....	cri-mel A
—	11	3	Dear Wife.....	com A
—	6	3	Deputy Marshal.....	mus-wes AYC
1	3	2	D.O.A.....	cri-mel A
—	8	10	Doctor and the Girl, The.....	dr A
1	2	7	Dolwyn.....	dr A
—	8	1	Down Dakota Way.....	mus-wes-c AYC
—	2	4	Dream No More.....	doc-dr A
—	3	2	Eagle and the Hawk, The.....	hist-mel-c A
—	2	1	East of Java.....	mel A
—	6	8	East Side, West Side.....	dr A
—	12	2	Everybody Does It.....	mus-com A
—	8	3	Facts of Love, The.....	com A
1	10	2	Fame is the Spur.....	dr A
—	1	2	Fantastic Night.....	fan A
—	1	4	Father is a Bachelor.....	dr A
—	1	4	Feudin' Rhythm.....	mus-wes AYC
—	3	7	Fighting Kentuckian, The.....	hist-dr A
—	4	6	Fighting Man of the Plains.....	wes-c A
—	1	3	Fighting Redhead, The.....	wes-c AYC
—	1	5	First Front, The.....	war-dr A
—	8	—	Flame of Youth.....	mel A
—	3	3	Flight into France.....	war-dr A
—	1	7	Flying Saucer, The.....	mys-mel A
1	8	—	Francis.....	com AYC
—	1	2	Francois Villon.....	dr A
—	5	6	Free for All.....	com AYC
—	4	—	Frustration.....	dr A
—	7	4	Gal Who Took the West, The.....	mus-wes-c A
—	3	4	Gay Lady, The.....	mus-com-c A
—	3	8	Germany, Year Zero.....	war-dr A
—	2	2	Gigi.....	dr A
—	2	9	Girls' School.....	dr AYC
—	7	7	Give Us This Day.....	dr A
—	6	—	Glass Mountain, The.....	mus-dr A
—	3	—	God, Man, and Devil.....	dr A
—	1	4	Golden Madonna, The.....	dr A
—	7	1	Golden Stallion, The.....	mus-wes-c AYC
—	3	3	Grand Canyon.....	com-c AYC
—	8	8	Great Lover, The.....	com A

A	B	C				A	B	C			
—	4	3	Great Rupert, The	mus-dr	AYC	—	5	—	Riders of the Range	wes	AYC
—	4	—	Guilty Bystander	mys-mel	A	2	5	—	Riding High	mus-com	AYC
1	5	1	Guilty of Treason	dr	AYC	—	3	4	Rigoletto	mus-dr	A
4	11	1	Hasty Heart, The	war-dr	AY	—	3	4	Roaring Westward	wes	AYC
6	10	1	Heiress, The	dr	A	—	9	5	Rugged O'Riordana, The	dr	A
—	10	2	Hidden Room, The	cri-mel	A	—	7	1	Rusty's Birthday	dr	AYC
1	11	1	Holiday Affair	com	AYC	1	7	3	Saints and Sinners	dr	A
—	2	8	Holiday in Havana	mus-com-c	A	—	5	6	Samson and Delilah	dr-c	A
—	2	5	Hollywood Varieties	mus-com	A	—	2	6	San Antone Ambush	wes	AYC
—	3	—	Horsemen of the Sierras	wes	AYC	3	6	3	Sands of Iwo Jima	war-dr	A
—	1	10	House Across the Street, The	cri-mel	AY	—	2	2	Satan's Cradle	wes	A
—	11	1	I Married a Communist	mel	A	—	2	1	Shadows of the West	wes	AYC
—	—	—	Ichabod and Mr. Toad, see Adventures of	—	—	—	2	2	Shamed	dr	A
—	3	2	Il Trovatore	mus-mel	A	5	12	2	She Wore a Yellow Ribbon	wes-mel-c	AYC
—	—	—	Indian Scout	mel	AYC	—	4	3	Side Street	cri-mel	A
1	10	5	Inspector General, The	mus-com-c	AY	—	2	7	Silent Dust	war-dr	A
3	7	7	Intruder in the Dust	soc-dr	AY	—	3	1	Somewhere in Europe	dr	A
—	2	5	It Happened in Europe	war-dr	A	—	3	0	Son of Billy the Kid	wes	AYC
—	1	3	Ivan Pavlov	biog	A	—	2	3	Sons of New Mexico	mus-wes	AYC
—	4	1	Joe Palooka Meets Humphrey	mel	AYC	—	2	3	South of Death Valley	wes	AYC
—	6	1	Johnny Holiday	dr	AY	—	5	10	South Sea Sinner	mel	A
—	1	5	Just a Big Simple Girl	com	A	—	5	—	Square Dance Jubilee	mus-wes	AYC
—	1	4	Katrina	dr	A	—	2	3	Storm Over Wyoming	wes	AYC
—	7	4	Key to the City	com	A	—	6	8	Story of Molly X, The	cri-mel	A
—	3	7	Kid from Cleveland, The	dr	AYC	—	8	6	Story of Seabiscuit, The	dr-c	AYC
—	2	2	Kid from Texas, The	wes-c	A	—	8	5	Strange Bargain	mys-mel	A
—	3	6	Kiss for Corliss, A	com	A	—	4	1	Strangers in the House	dr	A
—	9	3	Lady Takes a Sailor, The	com	A	—	1	6	Stromboli	dr	A
—	1	4	Laughing Lady, The	mus-dr-c	A	—	2	3	Sundowners, The	wes-c	A
—	—	4	Lost Youth	cri-mel	A	—	3	3	Sunshine Follows Rain	dr	A
3	6	4	Malaya	war-mel	A	—	8	2	Tattooed Stranger, The	cri-mel	AYC
—	9	5	Man on the Eiffel Tower, The	cri-mel-c	A	—	5	4	Tell It to the Judge	com	A
—	2	4	Mark of the Gorilla	mel	YC	—	8	6	Tension	mys-mel	A
—	2	10	Mary Ryan, Detective	cri-mel	A	1	9	7	That Forayte Woman	dr-c	A
—	4	4	Masked Raiders	wes	A	—	6	8	Thelma Jordan	mel	A
—	3	4	Master Minds	com	AY	—	4	4	There's a Girl in My Heart	mus-dr	AYC
—	—	5	Merchant of Slaves	mel	A	2	13	3	They Live by Night	—	—
1	5	4	Miss Grant Takes Richmond	com	A	—	—	—	(previously reviewed as The Twisted Road, CR Bul. March 1949)	—	—
—	2	2	Monelle	dr	A	—	10	7	Thieves' Highway	cri-dr	A
—	8	3	Montana	mus-wes-c	AYC	9	5	—	Third Man, The	cri-mel	A
—	4	3	Mother Didn't Tell Me	com	A	—	7	3	Threat, The	cri-mel	A
—	12	2	Mrs. Mike	dr	A	1	3	2	Three Came Home	war-dr	A
—	2	7	My Foolish Heart	soc-dr	A	—	12	3	Tight Little Island	com	A
—	4	3	Mysterious Desperado, The	wes	AYC	4	4	1	Titan, The	doc	AYC
—	—	4	Naked Woman, The	dr	A	—	7	8	Tokyo Joe	war-dr	A
1	5	—	Nancy Goes to Rio	mus-com-c	A	—	2	2	Tombolo	dr	A
—	3	4	Navajo Trail Raiders	wes	AYC	—	3	6	Tough Assignment	cri-mel	AYC
—	8	4	Nevadan, The	wes-c	AYC	—	3	—	Trail of the Mounties	cri-mel	AYC
—	4	4	Never Fear	dr	A	—	4	—	Trail's End	wes	AYC
—	1	4	No Room at the Inn	dr	A	—	3	2	Train Goes East, The	com-c	A
—	9	5	Oh, You Beautiful Doll	mus-com-c	A	—	7	3	Trapped	mys-mel	AYC
2	14	—	On the Town	mus-com-c	A	—	1	10	Traveling Saleswoman, The	mus-com	A
—	4	8	Once Upon a Dream	com	A	—	1	5	Treasure of Monte Cristo	mys-mel	A
—	5	—	Outside the Wall	cri-mel	A	5	9	—	12 O'Clock High	war-dr	A
—	2	1	Pagliacci	mus-dr	A	—	—	4	Twilight	dr	A
—	2	9	Paid in Full	dr	A	—	1	10	Under the Sun of Rome	war-dr	A
—	3	3	Palomino, The	wes	YC	—	7	6	Undertow	cri-mel	A
1	12	1	Passport to Pimlico	com	AY	—	—	4	Unmasked	cri-dr	A
—	1	4	Peddler and the Lady, The	dr	A	—	—	4	Vautrin, the Thief	dr	A
—	3	3	Peddlin' in Society	dr	A	—	1	4	Vilna Legend, A	dr	A
4	14	2	Pinky	soc-dr	A	—	1	2	Voice of Love, The	mus-dr	A
—	4	1	Pioneer Marshal	wes	AYC	—	—	4	West of El Dorado	mus-wes	AYC
—	4	4	Pirates of Capri, The	adv	A	—	2	3	Western Renegades	wes	AYC
—	7	5	Port of New York	cri-mel	A	5	5	—	When Willie Comes	—	—
—	3	—	Prelude to Madness	dr	A	—	—	—	Marching Home	war-cont	A
1	8	5	Prince of Foxes	hist-dr	A	—	8	8	Whirlpool	dr	A
—	2	8	Prison Warden	cri-mel	A	2	8	5	White Heat	cri-mel	A
—	2	5	Project X	cri-mel	A	—	5	6	Without Honor	—	—
—	3	3	Radar Secret Service	mys-mel	AYC	—	1	2	Without Pity	soc-dr	A
—	1	3	Range Justice	wes	AYC	—	5	5	Wolf Hunters, The	mel	AYC
—	8	2	Ranger of Cherokee Strip	wes	AYC	—	—	4	Woman	dr	A
—	5	9	Reckless Moment, The	mel	A	—	9	—	Woman in Hiding	mel	A
10	6	1	Red Danube, The	war-dr	AYC	—	—	—	Woman on Pier 13, The	—	—
—	4	1	Red Desert	wes	AYC	—	—	—	See I Married a Communist	—	—
—	4	1	Red Meadows	propaganda-dr	A	—	5	11	Yes Sir, That's My Baby	mus-com-c	AYC
—	1	3	Renegades of the Sage	wes	AYC	—	—	5	Young Guard	war-dr	A
—	3	—	Return of the Black Eagle	mel	A	—	6	3	Young Man With a Horn	mus-dr	A
—	4	4	Riders in the Sky	mus-wes-c	AYC	—	—	4	Youth of Athens	war-dr	A
—	—	4	Riders of the Dusk	wes	AYC	—	1	8	Zamba	adv	AYC

# The Consumers' Observation Post

(Continued from page 4)

Dr. Mills pointed out that the U. S. Public Health Service focused its interest on the health of workers within plants and has given too little attention to the relation of industrial air pollution to community health. He urges the setting up of standards of safety that will safeguard under the most adverse weather or smog conditions the health of people who live in the vicinity of industrial plants having stacks that give off harmful gases.

\* \* \*

THE GROWTH, REPLACEMENT, AND TYPES OF HAIR was recently a topic of learned discussion by the New York Academy of Sciences. Reports were read on the chemical content of hair from a variety of animals, and the rate of growth and the life span of hair of an average man, but the New York Times reporter who covered the meeting commented that the question why hair does or does not grow had yet to be decided at the close of the meeting. He noted that about half the scientists present were bald.

\* \* \*

PRIVATE ENTERPRISE finds it difficult to do business in the government-controlled atomic-energy city of Richland, Washington. According to a United Press release, William Simonds of the Richland Motor Company canceled his \$3000



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a month lease and was liquidating his business. He considered the rent charged "fantastic" and had been refused permission to choose a site on which to erect his own building. There have been other complaints from this city, which is owned by a presumably benevolent government and administered by the Atomic Energy Commission; the Richland City Council discovered to its chagrin that it had no power to require licensing of dogs or to set up its own rules for proper garbage disposal without first getting permission from the AEC's lawyers.

\* \* \*

#### NEWLY AVAILABLE:

Esoterica (Mitchum Distributors, 307 Fifth Ave., New York City), 3 oz., \$1.50 plus tax. This product is currently advertised in many parts of the country as a "marvelous," "new hand cream." Careful reading of the label reveals the fact that the "new" cream contains 3% ammoniated mercury and 2% powdered calomel. Ammoniated mercury was a common ingredient of many bleach and freckle creams that were widely sold in the early thirties, before the passage of the Food, Drug, and Cosmetic Act in 1938. The dangers involved in their use were exposed in *Skin Deep*, a 1934 best seller by M. C. Phillips. Although the Food and Drug Administration has issued an opinion that bleach preparations containing 5% (or less) of ammoniated mercury do not violate the Food, Drug, and Cosmetic Act if they are properly labeled, it has also pointed out that such products should not be applied to irritated, cut, bruised, or sunburned skin, or used after shaving or after use of a depilatory. It has also issued a warning that prolonged use of such products may produce unsightly discoloration and that application to a large area of the body is dangerous. The newspaper advertising for Esoterica, currently available, carried no cautionary note of any kind. On the label of the jar appeared the admonition: "Use exactly as directed in folder attached to beautify your hands, face, arms, or neck." This apparently referred to directions for making a test for allergy before use and advice to apply sparingly once a day for the first two or three days. There was the further instruction: "If any irritation appears, use a good neutral cream over the area. This local irritation will disappear in a day or two. Then try Esoterica again. If irritation persists, do not use the cream. . . ." In the light of all the literature available on the subject of the dangers of indiscriminate use of ammoniated mercury cosmetic products, it would be our opinion that the cream is not one to be used routinely as a hand cream and powder base, as recommended in its sales literature. CR would class it as a C-Not-Recommended product.

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# PHONOGRAPH RECORDS

BY WALTER KRUGENHOFER

Please Note: In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended. Although nearly all new releases of serious music are heard, space narrows comment, generally, to items which merit high ratings.

**Bach:** *A German Organ Mass*. Heitmann (organ). Capitol-Telefunken LP 8029. \$4.85. Since 1950 is the year of the bicentenary of Bach's death, special Bach releases are planned by all leading record companies. This work is played on the organ built in 1706 in the Charlottenburg Palace in Berlin. It consists of 11 compositions — prelude, chorale preludes, duetto and fugue — which Bach played to glorify the basic dogma of Lutheran Christianity. Recorded with appropriate spaciousness. Some wavering of pitch.

**Interpretation AA**  
**Fidelity of Recording A**

**Bach:** *Suites Nos. 4 and 5 for Unaccompanied Cello* (13 sides) & *Adagio* (1 side). Pablo Casals (cello). RCA Victor Set 1302. \$9.75. With this album, one of the world's greatest musicians completes his recording of the Bach Suites. To connoisseurs the music will sound melodious, light, varied. In 1950 we expect more bite in the cello recording for an AA rating.

**Interpretation AA**  
**Fidelity of Recording A**

**Bach:** *The Well-Tempered Clavier* — Book I. Preludes and Fugues, Nos. 1 to 8. Wanda Landowska (harpsichord). RCA Victor LP 1017. Price to be announced. Victor's LP's are off to an impressive start. The recording is excellent. Surfaces are even more quiet than the 45 rpm. set of this music — Victor WDM 1338. \$6.20. Recorded in Victor's New York studio last summer. For maximum realism, play at a low level, thus approximating the volume of the harpsichord. Here a distinguished artist performs the first 8 of the 48 Preludes and Fugues which comprise this monumental work, frequently called the foundation of all keyboard music. The remaining 40 are on the way.

**Interpretation AA**  
**Fidelity of Recording A**

Victor's first list of LP pressings includes some released on 78's years ago. Consequently, fidelity varies. An RCA engineer played many sides for me on high-fidelity studio equipment and on a less expensive (cabinet excluded) RCA Victor commercial combination set. The highs were far more prominent on the studio equipment but, occasionally, out of balance with the middle and bass which, relatively, were more prominent on the commercial set. This indicates again a tendency of American engineers in playback and recording and of hi-fi fans in playback to show off the high end rather than to attain the realistic balance heard in actual performances. Now the 5 major plus 18 minor companies issue 33-1/3 (Long Playing) disks pioneered by Columbia and regarded by Consumers' Research (CR BUL., September 1948) as "one of the most significant advances in the record industry since the development of electrical recording techniques."

**Bizet:** *Carmen Suite & Tchaikovsky: Capriccio Italien*. Columbia Symphony Orchestra under Beecham. Columbia LP 4287. \$4.85. New recordings of two favorite Beecham items by a pickup orchestra. *Carmen* emerges with verve but the *Capriccio* drags. The orchestral attack is not always firm. Spacious recording.

**Interpretation B**  
**Fidelity of Recording A**

**Bruckner:** *Symphony No. 5*. Hamburg Philharmonic Orchestra under Jochum. 4 sides, Capitol-Telefunken LP 8049 and 8050. \$9.70. Long, sombre, rambling work which Brucknerites adore. For them, particularly, this is an exceptional pair of disks. The performance is commendably straightforward and the recording resonant, though not widest range, with particularly fine brass. Some tendency to overcut as, for example, the concluding grooves of side 1.

**Interpretation AA**  
**Fidelity of Recording A**

**Chopin:** *Les Sylphides* — Ballet & *Villa-Lobos: Uirapuru*. Philharmonic Symphony Orchestra of New York under Kurtz. Columbia LP 4255. \$4.95. *Les Sylphides* is a collection of tuneful Chopin numbers and excerpts which I prefer to hear on the piano, as Chopin intended. *Uirapuru* is a dull symphonic poem about a legendary enchanted bird, Indian forests, etc. The strange sounds of the forest may interest hi-fi fans. Both compositions are performed with less color and dash than the music deserves. The recording sounds like a one-microphone job, with satisfactory hall resonance. Detail is not clear, however, and the solo clarinet is fuzzy.

**Interpretation A**  
**Fidelity of Recording A**

**Copland:** *Ballet Suite from Billy the Kid* (5 sides) & *Statements for Orchestra—Jingo* (1 side). RCA Victor Symphony Orchestra under Bernstein. RCA Victor Set WDM 1333. \$4.75. Some of the best music of this ballet is omitted from the suite. What is left is simple, folk-like and reasonably interesting but less so than the best of Copland's later works. Robust performance and resonant recording that could stand more bass.

**Interpretation AA**  
**Fidelity of Recording A**

**Dohnanyi:** *Suite en Valse*. Dohnanyi and Kilenyi (duo-pianos) and Arrangements by Dohnanyi of *Dellibes: Nida Waltz*, and **Schubert: Valses Nobles**. Kilenyi (piano). Columbia LP 4256. \$4.85. There's joy and abandon here! For the most part, clear playing and good recording.

**Interpretation AA**  
**Fidelity of Recording A**

**Mozart:** *Concerto No. 2 for Horn and Orchestra*. Dennis Brain with the Philharmonia Orchestra under Susskind & *Concerto No. 4 for Horn and Orchestra*. Dennis Brain with the Halle Orchestra. Columbia LP 2088. \$3.85. Charming works in which the solo part is played with fervor and musicianship of the highest order. The Philharmonia gives better support than the Halle. The recording of *Concerto No. 4* is several years old and not as wide ranged as *No. 2* which is harshly recorded, though in both cases the horn comes through well.

**Interpretation A**  
**Fidelity of Recording A**

**Offenbach:** *The Tales of Hoffmann*. Jobin, Doria, Bovy, Boué, etc., under Cluytens conducting the Chorus and Orchestra du Théâtre National de l'Opéra Comique. 6 sides, Columbia LP 106. \$14.55. Offenbach's enchanting masterpiece is particularly welcome on records because it is seldom performed in U.S.A. Jobin stars as Hoffmann but the other principals, despite ups and downs, are experts in French style and nearly his equal. Cluytens keeps the show moving but his orchestra could be more incisive. Obviously great care has been exercised in the entire production. There is a dry quality about the reproduction which characterizes French recording but it is not objectionable. I miss the widest ranges of the orchestra and realize that relatively, it is just a mile too far from the microphone. The singers are forward, well recorded. Overall, though imperfect, the set is above an average opera production.

**Interpretation A**  
**Fidelity of Recording A**

**Prokofiev:** *Sonata in F Minor*, Op. 80. Szegedi (violin) & Levine (piano) & *Sonata in D Major* (Op. 94). Szegedi (violin) & Hambro (piano). Columbia LP 4257. \$4.85. Spirited, often complex modern works championed by Szegedi. Superb performances. Szegedi stands so close to the mike that his breathing is audible. While the violin tone is rough infrequently, it is never unkind to this music. The recording balance and quality of the *F Minor* tops the companion piece.

**Interpretation AA**  
**Fidelity of Recording A**

